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## Low Quiescent Current, Programmable-Delay Supervisory Circuit

#### **FEATURES**

- Power-On Reset Generator with Adjustable Delay Time: 1.25ms to 10s
- Very Low Quiescent Current: 2.4μA typ
- High Threshold Accuracy: 0.5% typ
- Fixed Threshold Voltages for Standard Voltage Rails from 0.9V to 5V and Adjustable Voltage Down to 0.4V Are Available
- Manual Reset (MR) Input
- Open-Drain RESET Output
- Temperature Range: –40°C to +125°C
- Small SOT23 and 2mm × 2mm QFN Packages

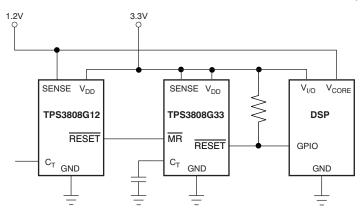
#### **APPLICATIONS**

- DSP or Microcontroller Applications
- Notebook/Desktop Computers
- PDAs/Hand-Held Products
- Portable/Battery-Powered Products
- FPGA/ASIC Applications

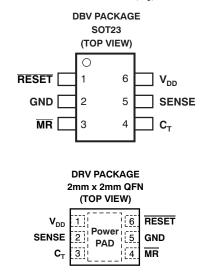
#### **DESCRIPTION**

The TPS3808xxx family of microprocessor supervisory circuits monitor system voltages from 0.4V to 5.0V, asserting an open-drain RESET signal when the SENSE voltage drops below a preset threshold or when the manual reset (MR) pin drops to a logic low. The RESET output remains low for the user-adjustable delay time after the SENSE voltage and manual reset (MR) return above the respective thresholds.

The TPS3808 uses a precision reference to achieve 0.5% threshold accuracy for  $V_{\text{IT}} \leq 3.3 \text{V}$ . The reset delay time can be set to 20ms by disconnecting the  $C_{\text{T}}$  pin, 300ms by connecting the  $C_{\text{T}}$  pin to  $V_{\text{DD}}$  using a resistor, or can be user-adjusted between 1.25ms and 10s by connecting the  $C_{\text{T}}$  pin to an external capacitor. The TPS3808 has a very low typical quiescent current of 2.4 $\mu$ A so it is well-suited to battery-powered applications. It is available in a small SOT23 and an ultra-small 2mm × 2mm QFN PowerPAD<sup>TM</sup> package, and is fully specified over a temperature range of -40°C to +125°C (T<sub>J</sub>).



**Typical Application Circuit** 





Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this data sheet.

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This integrated circuit can be damaged by ESD. Texas Instruments recommends that all integrated circuits be handled with appropriate precautions. Failure to observe proper handling and installation procedures can cause damage.

ESD damage can range from subtle performance degradation to complete device failure. Precision integrated circuits may be more susceptible to damage because very small parametric changes could cause the device not to meet its published specifications.

#### ORDERING INFORMATION(1)

PRODUCT	NOMINAL SUPPLY VOLTAGE <sup>(2)</sup>	THRESHOLD VOLTAGE (V <sub>IT</sub> )
TPS3808G01	Adjustable	0.405V
TPS3808G09	0.9V	0.84V
TPS3808G12	1.2V	1.12V
TPS3808G125	1.25V	1.16V
TPS3808G15	1.5V	1.40V
TPS3808G18	1.8V	1.67V
TPS3808G19	1.9V	1.77V
TPS3808G25	2.5V	2.33V
TPS3808G30	3.0V	2.79V
TPS3808G33	3.3V	3.07V
TPS3808G50	5.0V	4.65V

<sup>(1)</sup> For the most current package and ordering information see the Package Option Addendum at the end of this document, or see the TI web site at www.ti.com.

#### ABSOLUTE MAXIMUM RATINGS(1)

Over operating junction temperature range, unless otherwise noted.

	TPS3808	UNIT
Input voltage range, V <sub>DD</sub>	-0.3 to 7.0	V
$C_T$ voltage range, $V_{CT}$	-0.3 to V <sub>DD</sub> + 0.3	V
Other voltage ranges: V <sub>RESET</sub> , V <sub>MR</sub> , V <sub>SENSE</sub>	-0.3 to 7	V
RESET pin current	5	mA
Operating junction temperature range, T <sub>J</sub> <sup>(2)</sup>	-40 to +150	°C
Storage temperature range, T <sub>STG</sub>	−65 to +150	°C
ESD rating, HBM	2	kV
ESD rating, CDM	500	V

<sup>(1)</sup> Stresses beyond those listed under absolute maximum ratings may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under the Electrical Characteristics is not implied. Exposure to absolute maximum rated conditions for extended periods may affect device reliability.

(2) As a result of the low dissipated power in this device, it is assumed that  $T_{I} = T_{A}$ .

<sup>(2)</sup> Custom threshold voltages from 0.82V to 3.3V, 4.4V to 5.0V are available through the use of factory EEPROM programming. Minimum order quantities apply. Contact factory for details and availability.

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#### **ELECTRICAL CHARACTERISTICS**

 $1.7\text{V} \le \text{V}_{\text{DD}} \le 6.5\text{V}$ ,  $R_{\text{LRESET}} = 100\text{k}\Omega$ ,  $C_{\text{LRESET}} = 50\text{pF}$ , over operating temperature range ( $T_{\text{J}} = -40^{\circ}\text{C}$  to +125°C), unless otherwise noted. Typical values are at  $T_{\text{J}} = +25^{\circ}\text{C}$ .

	PARAMETER		TEST CONDITIONS	MIN	TYP	MAX	UNIT
	land taken by manage		-40°C < T <sub>J</sub> < +125°C	1.7		6.5	V
$V_{DD}$	Input supply range		0°C < T <sub>J</sub> < +85°C	1.65		6.5	V
	Supply ourrent (ourrent	nto \/ nin)	$\frac{V_{DD}}{MR} = 3.3V, \overline{RESET}$ not asserted MR, $\overline{RESET}$ , $C_T$ open		2.4	5.0	μΑ
I <sub>DD</sub>	Supply current (current i	nto v <sub>DD</sub> pin)	$\frac{V_{DD}}{MR} = 6.5V, \overline{RESET}$ not asserted MR, $\overline{RESET}$ , $C_T$ open		2.7	6.0	μΑ
V <sub>OL</sub>	Low-level output voltage		$1.3V \le V_{DD} < 1.8V, I_{OL} = 0.4mA$			0.3	V
VOL	Low-level output voltage		$1.8V \le V_{DD} \le 6.5V$ , $I_{OL} = 1.0mA$			0.4	V
	Power-up reset voltage <sup>(</sup>	1)	$V_{OL}$ (max) = 0.2V, $I_{RESET}$ = 15 $\mu$ A			0.8	V
		TPS3808G01		-2.0	±1.0	+2.0	
	Negative-going	V <sub>IT</sub> ≤ 3.3V		-1.5	±0.5	+1.5	
$V_{\text{IT}}$	input threshold	$3.3V < V_{IT} \le 5.0V$		-2.0	±1.0	+2.0	%
	accuracy	V <sub>IT</sub> ≤ 3.3V	-40°C < T <sub>J</sub> < +85°C	-1.25	±0.5	+1.25	ļ
		3.3V < V <sub>IT</sub> ≤ 5.0V	-40°C < T <sub>J</sub> < +85°C	-1.5	±0.5	+1.5	
		TPS3808G01			1.5	3.0	
$V_{HYS}$	Hysteresis on V <sub>IT</sub> pin	Firedoraniana	-40°C < T <sub>J</sub> < +85°C		1.0	2.0	$%V_{IT}$
		Fixed versions			1.0	2.5	
$R_{\overline{MR}}$	MR Internal pull-up resis	tance		70	90		kΩ
	Input current at	TPS3808G01	V <sub>SENSE</sub> = V <sub>IT</sub>	-25		25	nA
ISENSE	SENSE pin	Fixed versions	V <sub>SENSE</sub> = 6.5V		1.7		μΑ
I <sub>OH</sub>	RESET leakage current	·	V <sub>RESET</sub> = 6.5V, RESET not asserted			300	nA
<u> </u>	Input capacitance,	C <sub>T</sub> pin	V <sub>IN</sub> = 0V to V <sub>DD</sub>		5		~F
C <sub>IN</sub>	any pin	Other pins	V <sub>IN</sub> = 0V to 6.5V		5		pF
V <sub>IL</sub>	MR logic low input			0		0.3 V <sub>DD</sub>	V
V <sub>IH</sub>	MR logic high input			0.7 V <sub>DD</sub>		$V_{DD}$	V
	Input pulse width	SENSE	$V_{IH} = 1.05V_{IT}, V_{IL} = 0.95V_{IT}$		20		
t <sub>w</sub>	to RESET	MR	$V_{IH} = 0.7 V_{DD}, V_{IL} = 0.3 V_{DD}$		0.001		μs
		C <sub>T</sub> = Open		12	20	28	ms
	DECET delegation	$C_T = V_{DD}$	Oct. Titalian Biannan	180	300	420	ms
t <sub>d</sub>	RESET delay time	C <sub>T</sub> = 100pF	See Timing Diagram	0.75	1.25	1.75	ms
		C <sub>T</sub> = 180nF		0.7	1.2	1.7	s
	Propagation delay	MR to RESET	$V_{IH} = 0.7 V_{DD}, V_{IL} = 0.3 V_{DD}$		150		ns
$t_{\text{pHL}}$	High to low level RESET delay	SENSE to RESET	$V_{IH} = 1.05V_{IT}, V_{IL} = 0.95V_{IT}$		20		μs
$\theta_{JA}$	Thermal resistance, june	tion-to-ambient			290		°C/W

<sup>(1)</sup> The lowest supply voltage (V<sub>DD</sub>) at which  $\overline{\text{RESET}}$  becomes active.  $T_{\text{rise}(\text{VDD})} \ge 15 \mu \text{s/V}$ .



#### **FUNCTIONAL BLOCK DIAGRAMS**

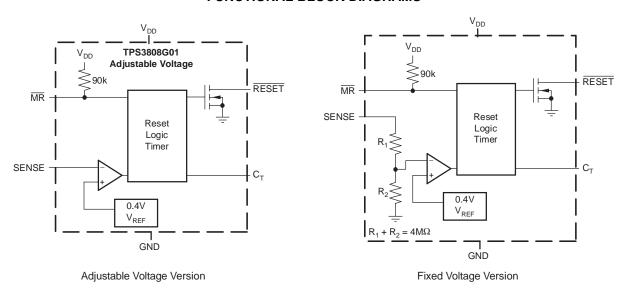
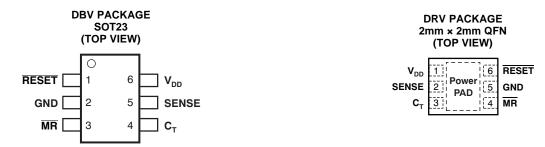


Figure 1. Adjustable and Fixed Voltage Versions

#### **PIN ASSIGNMENTS**



**Table 1. TERMINAL FUNCTIONS** 

TER	MINAL	
NAME	SOT23 (DBV) PIN NO.	DESCRIPTION
RESET	1	RESET is an open-drain output that is driven to a low impedance state when RESET is asserted (either the SENSE input is lower than the threshold voltage ( $V_{IT}$ ) or the $\overline{MR}$ pin is set to a logic low). RESET will remain low (asserted) for the reset period after both SENSE is above $V_{IT}$ and $\overline{MR}$ is set to a logic high. A pull-up resistor from 10kΩ to 1MΩ should be used on this pin, and allows the reset pin to attain voltages higher than $V_{DD}$ .
GND	2	Ground
MR	3	Driving the manual reset pin $(\overline{MR})$ low asserts $\overline{RESET}$ . $\overline{MR}$ is internally tied to $V_{DD}$ by a $90k\Omega$ pull-up resistor.
C <sub>T</sub>	4	Reset period programming pin. Connecting this pin to $V_{DD}$ through a $40k\Omega$ to $200k\Omega$ resistor or leaving it open results in fixed delay times (see Electrical Characteristics). Connecting this pin to a ground referenced capacitor $\geq 100pF$ gives a user-programmable delay time. See the Selecting the Reset Delay Time section for more information.
SENSE	5	This pin is connected to the voltage to be monitored. If the voltage at this terminal drops below the threshold voltage $V_{IT}$ , then $\overline{RESET}$ is asserted.
V <sub>DD</sub>	6	Supply voltage. It is good analog design practice to place a 0.1µF ceramic capacitor close to this pin.
PowerPAD		PowerPAD. Connect to ground plane to enhance thermal performance of package.



#### **TIMING DIAGRAM**

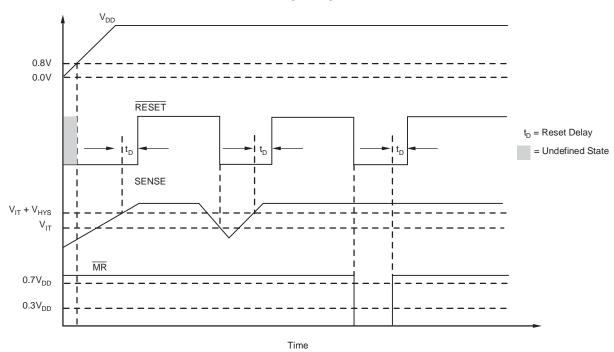


Figure 2. TPS3808 Timing Diagram Showing MR and SENSE Reset Timing

#### **TRUTH TABLE**

MR	SENSE > V <sub>IT</sub>	RESET
L	0	L
L	1	L
Н	0	L
Н	1	Н



#### **TYPICAL CHARACTERISTICS**

At  $T_J$  = +25°C,  $V_{DD}$  = 3.3V,  $R_{LRESET}$  = 100k $\Omega$ , and  $C_{LRESET}$  = 50pF, unless otherwise noted.

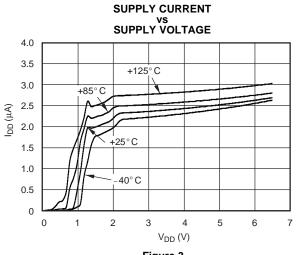


Figure 3.

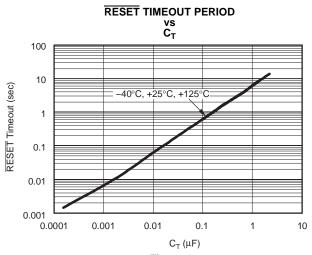


Figure 4.

#### NORMALIZED RESET TIMEOUT PERIOD

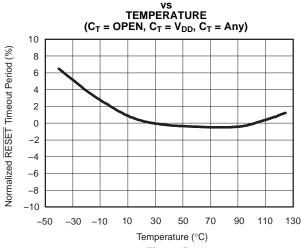


Figure 5.

#### **MAXIMUM TRANSIENT DURATION AT SENSE** SENSE THRESHOLD OVERDRIVE VOLTAGE

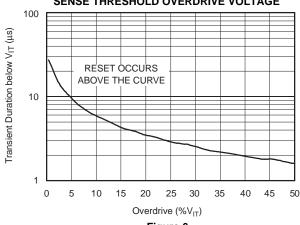
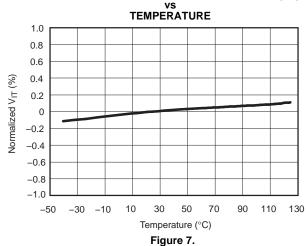


Figure 6.

#### NORMALIZED SENSE THRESHOLD VOLTAGE (VIT)



LOW-LEVEL RESET VOLTAGE

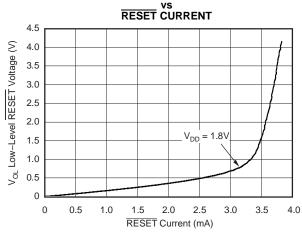


Figure 8.



#### **TYPICAL CHARACTERISTICS (continued)**

At  $T_J$  = +25°C,  $V_{DD}$  = 3.3V,  $R_{LRESET}$  = 100k $\Omega$ , and  $C_{LRESET}$  = 50pF, unless otherwise noted.

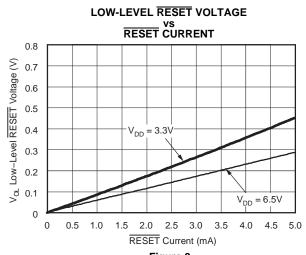


Figure 9.



#### **DEVICE OPERATION**

The TPS3808 microprocessor supervisory product family is designed to assert a RESET signal when either the SENSE pin voltage drops below V<sub>IT</sub> or the manual reset (MR) is driven low. The RESET output remains asserted for a user-adjustable time after both the manual reset (MR) and SENSE voltages return above the respective thresholds. A broad range of voltage threshold and reset delay time adjustments are available, allowing these devices to be used in a wide array of applications. Reset threshold voltages can be factory-set from 0.82V to 3.3V or from 4.4V to 5.0V, while the TPS3808G01 can be set to any voltage above 0.405V using an external resistor divider. Two preset delay times are also user-selectable: connecting the  $C_{\mathsf{T}}$  pin to  $V_{\mathsf{DD}}$  results in a 300ms reset delay, while leaving the C<sub>T</sub> pin open yields a 20ms reset delay. In addition, connecting a capacitor between C<sub>T</sub> and GND allows the designer to select any reset delay period from 1.25ms to 10s.

#### **RESET OUTPUT**

A typical application of the TPS3808G25 used with the OMAP1510 processor is shown in Figure 10. The open-drain RESET output is typically connected to the RESET input of a microprocessor. A pull-up resistor must be used to hold this line high when RESET is not asserted. The RESET output is undefined for voltage below 0.8V, but this is normally not a problem since most microprocessors do not function below this voltage. RESET remains high (unasserted) as long as SENSE is above its threshold (VIT) and the manual reset (MR) is logic high. If either SENSE falls below VIT or MR is driven low, RESET is asserted, driving the RESET pin to a low impedance.

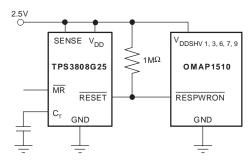


Figure 10. Typical Application of the TPS3808 with an OMAP Processor

Once  $\overline{\text{MR}}$  is again logic high and SENSE is above V<sub>IT</sub> + V<sub>HYS</sub> (the threshold hysteresis), a delay circuit is enabled which holds RESET low for a specified reset delay period. Once the reset delay has expired, the RESET pin goes to a high impedance state. The pull-up resistor from the open-drain RESET to the

supply line can be used to allow the reset signal for the microprocessor to have a voltage higher than  $V_{DD}$  (up to 6.5V). The pull-up resistor should be no smaller than  $10k\Omega$  as a result of the finite impedance of the RESET line.

#### **SENSE INPUT**

The SENSE input provides a terminal at which any system voltage can be monitored. If the voltage on this pin drops below  $V_{\rm IT}$ , then RESET is asserted. The comparator has a built-in hysteresis to ensure smooth RESET assertions and de-assertions. It is good analog design practice to put a 1nF to 10nF bypass capacitor on the SENSE input to reduce sensitivity to transients and layout parasitics.

The TPS3808G01 can be used to monitor any voltage rail down to 0.405V using the circuit shown in Figure 11.

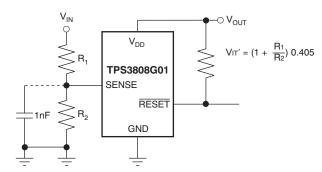


Figure 11. Using the TPS3808G01 to Monitor a User-Defined Threshold Voltage

#### MANUAL RESET (MR) INPUT

The manual reset  $(\overline{MR})$  input allows a processor or other logic circuits to initiate a reset. A logic low  $(0.3V_{DD})$  on MR causes RESET to assert. After MR returns to a logic high and SENSE is above its reset threshold, RESET is de-asserted after the user defined reset delay expires. Note that MR is internally tied to  $V_{DD}$  using a  $90k\Omega$  resistor so this pin can be left unconnected if  $\overline{MR}$  will not be used.

See Figure 12 for how  $\overline{\text{MR}}$  can be used to monitor multiple system voltages. Note that if the logic signal driving  $\overline{\text{MR}}$  does not go fully to  $V_{DD}$ , there will be some additional current draw into  $\underline{V}_{DD}$  as a result of the internal pull-up resistor on  $\overline{\text{MR}}$ . To minimize current draw, a logic-level FET can be used as illustrated in Figure 13.



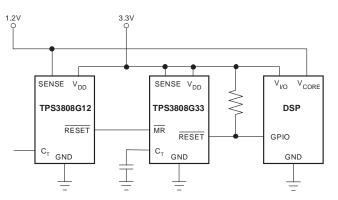


Figure 12. Using MR to Monitor Multiple System Voltages

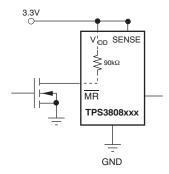


Figure 13. Using an External MOSFET to Minimize I<sub>DD</sub> When MR Signal Does Not Go to V<sub>DD</sub>

#### SELECTING THE RESET DELAY TIME

The TPS3808 has three options for setting the RESET delay time as shown in Figure 14. Figure 14a shows the configuration for a fixed 300ms typical delay time by tying  $C_T$  to  $V_{DD}$ ; a resistor from 40kΩ to 200kΩ must be used. Supply current is not affected

by the choice of resistor. Figure 14b shows a fixed 20ms delay time by leaving the  $C_T$  pin open. Figure 14c shows a ground referenced capacitor connected to  $C_T$  for a user-defined program time between 1.25ms and 10s.

The capacitor  $C_T$  should be  $\geq$  100pF nominal value in order for the TPS3808xxx to recognize that the capacitor is present. The capacitor value for a given delay time can be calculated using the following equation:

$$C_{T}(nF) = [t_{D}(s) - 0.5 \times 10^{-3}(s)] \times 175$$
 (1)

The reset delay time is determined by the time it takes an on-chip precision 220nA current source to charge the external capacitor to 1.23V. When a RESET is asserted the capacitor is discharged. When the RESET conditions are cleared, the internal current source is enabled and begins to charge the external capacitor. When the voltage on this capacitor reaches 1.23V, RESET is de-asserted. Note that a low leakage type capacitor such as a ceramic should be used, and that stray capacitance around this pin may cause errors in the reset delay time.

# IMMUNITY TO SENSE PIN VOLTAGE TRANSIENTS

The TPS3808 is relatively immune to short negative transients on the SENSE pin. Sensitivity to transients is dependent on threshold overdrive, as shown in the Maximum Transient Duration at Sense vs Sense Threshold Overdrive Voltage graph (Figure 6) in the Typical Characteristics section.

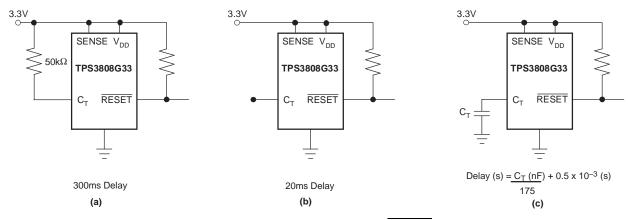


Figure 14. Configuration Used to Set the RESET Delay Time

#### **PACKAGING INFORMATION**

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/ Ball Finish	MSL Peak Temp <sup>(3)</sup>	Samples (Requires Login)
TPS3808G01DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G01DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G01DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G01DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G01DRVR	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G01DRVRG4	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G01DRVT	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G01DRVTG4	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G09DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G09DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G09DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G09DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G125DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G125DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G125DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G125DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G12DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	



Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/ Ball Finish	MSL Peak Temp <sup>(3)</sup>	Samples (Requires Login)
TPS3808G12DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G12DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G12DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G12DRVR	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G12DRVRG4	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G12DRVT	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G12DRVTG4	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G15DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G15DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G15DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G15DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G15DRVR	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G15DRVRG4	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G15DRVT	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G15DRVTG4	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G18DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G18DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G18DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	



Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/ Ball Finish	MSL Peak Temp <sup>(3)</sup>	Samples (Requires Login)
TPS3808G18DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G18DRVR	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G18DRVT	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G19DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G19DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G19DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G19DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G25DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G25DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G25DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G25DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G25DRVR	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G25DRVRG4	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G25DRVT	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G25DRVTG4	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G30DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G30DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G30DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	





Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/ Ball Finish	MSL Peak Temp <sup>(3)</sup>	Samples (Requires Login)
TPS3808G30DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G30DRVR	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G30DRVRG4	ACTIVE	SON	DRV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G30DRVT	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G30DRVTG4	ACTIVE	SON	DRV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G33DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G33DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G33DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G33DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G50DBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G50DBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G50DBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
TPS3808G50DBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	

<sup>(1)</sup> The marketing status values are defined as follows:

**ACTIVE:** Product device recommended for new designs.

LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

PREVIEW: Device has been announced but is not in production. Samples may or may not be available.

**OBSOLETE:** TI has discontinued the production of the device.

**TBD:** The Pb-Free/Green conversion plan has not been defined.

<sup>(2)</sup> Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), or Green (RoHS & no Sb/Br) - please check http://www.ti.com/productcontent for the latest availability information and additional product content details.



#### PACKAGE OPTION ADDENDUM

21-Apr-2011

**Pb-Free** (RoHS): TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes. **Pb-Free** (RoHS Exempt): This component has a RoHS exemption for either 1) lead-based flip-chip solder bumps used between the die and package, or 2) lead-based die adhesive used between the die and leadframe. The component is otherwise considered Pb-Free (RoHS compatible) as defined above.

Green (RoHS & no Sb/Br): TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

(3) MSL. Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

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In no event shall TI's liability arising out of such information exceed the total purchase price of the TI part(s) at issue in this document sold by TI to Customer on an annual basis.

OTHER QUALIFIED VERSIONS OF TPS3808G01, TPS3808G12, TPS3808G125, TPS3808G18, TPS3808G30, TPS3808G33, TPS3808G50:

Automotive: TPS3808G01-Q1, TPS3808G12-Q1, TPS3808G125-Q1, TPS3808G30-Q1, TPS3808G30-Q1, TPS3808G30-Q1

NOTE: Qualified Version Definitions:

Automotive - Q100 devices qualified for high-reliability automotive applications targeting zero defects

PACKAGE MATERIALS INFORMATION

www.ti.com 29-Jun-2011

#### TAPE AND REEL INFORMATION



# TAPE DIMENSIONS KO P1 BO BO Cavity AO

A0	Dimension designed to accommodate the component width
B0	Dimension designed to accommodate the component length
K0	Dimension designed to accommodate the component thickness
W	Overall width of the carrier tape
P1	Pitch between successive cavity centers

#### QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



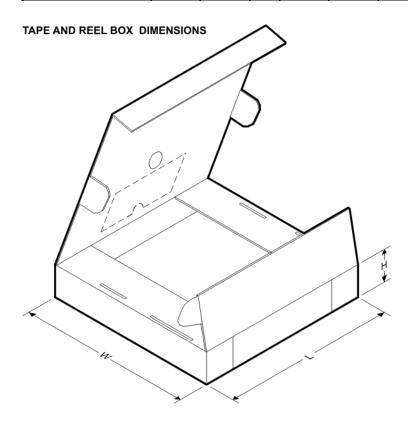
\*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
TPS3808G01DBVR	SOT-23	DBV	6	3000	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G01DBVR	SOT-23	DBV	6	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G01DBVT	SOT-23	DBV	6	250	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G01DRVR	SON	DRV	6	3000	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G01DRVT	SON	DRV	6	250	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G09DBVR	SOT-23	DBV	6	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G09DBVT	SOT-23	DBV	6	250	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G125DBVR	SOT-23	DBV	6	3000	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G125DBVT	SOT-23	DBV	6	250	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G12DBVR	SOT-23	DBV	6	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G12DBVR	SOT-23	DBV	6	3000	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G12DBVT	SOT-23	DBV	6	250	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G12DBVT	SOT-23	DBV	6	250	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G12DRVR	SON	DRV	6	3000	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G12DRVT	SON	DRV	6	250	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G15DBVR	SOT-23	DBV	6	3000	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G15DBVT	SOT-23	DBV	6	250	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G15DRVR	SON	DRV	6	3000	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2

## **PACKAGE MATERIALS INFORMATION**

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Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
TPS3808G15DRVT	SON	DRV	6	250	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G18DBVR	SOT-23	DBV	6	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G18DBVT	SOT-23	DBV	6	250	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G18DRVR	SON	DRV	6	3000	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G18DRVT	SON	DRV	6	250	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G19DBVR	SOT-23	DBV	6	3000	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G19DBVT	SOT-23	DBV	6	250	179.0	8.4	3.2	3.2	1.4	4.0	8.0	Q3
TPS3808G25DBVR	SOT-23	DBV	6	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G25DBVT	SOT-23	DBV	6	250	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G25DRVR	SON	DRV	6	3000	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G25DRVT	SON	DRV	6	250	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G30DBVR	SOT-23	DBV	6	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G30DBVT	SOT-23	DBV	6	250	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G30DRVR	SON	DRV	6	3000	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G30DRVT	SON	DRV	6	250	179.0	8.4	2.2	2.2	1.2	4.0	8.0	Q2
TPS3808G33DBVR	SOT-23	DBV	6	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G33DBVT	SOT-23	DBV	6	250	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G50DBVR	SOT-23	DBV	6	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
TPS3808G50DBVT	SOT-23	DBV	6	250	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3





## **PACKAGE MATERIALS INFORMATION**

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\*All dimensions are nominal

TPS3808G1DBVR	Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
TPS3808G01DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G01DRVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G01DRVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G09DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0 TPS3808G09DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G09DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVT SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 3000 180.0 180.0 180.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVT SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G15DBVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G13DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G13DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G13DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G25DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G30DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G30DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G30DBVR SOT-23 DBV 6 250 180.0	TPS3808G01DBVR	SOT-23	DBV	6	3000	203.0	203.0	35.0
TPS3808G01DRVR	TPS3808G01DBVR	SOT-23	DBV	6	3000	180.0	180.0	18.0
TPS3808G01DRVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G09DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0 TPS3808G09DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G125DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G125DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0 TPS3808G12DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G12DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G12DBVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G12DRVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G12DRVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G15DBVT SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVT SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVR SON DRV 6 250 203.0 203.0 35.0 TPS3808G15DBVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0 TPS3808G18DBVR SOT-23 DBV 6 3000 180.0 180.0 180.0 TPS3808G18DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G18DBVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G18DBVR SON-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G18DBVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G18DBVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G18DBVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G18DBVR SON-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G19DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G25DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G25DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G3DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G3DBVR SOT-23 DBV 6 3000 180.0 180.0 180.0 TPS3808G3DBVR SOT-23 DBV 6 250 203.0 203.0	TPS3808G01DBVT	SOT-23	DBV	6	250	180.0	180.0	18.0
TPS3808G09DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0 TPS3808G09DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G125DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G125DBVT SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G125DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0 TPS3808G125DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVT SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G12DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G12DBVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SON DRV 6 250 203.0 203.0 35.0 TPS3808G12DBVR SON DRV 6 250 203.0 203.0 35.0 TPS3808G12DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G18DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G25DBVR SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G3DBVR SOT-23 DBV 6 250 203.0 203.0 3	TPS3808G01DRVR	SON	DRV	6	3000	203.0	203.0	35.0
TPS3808G09DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G125DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G125DBVT SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G125DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0 TPS3808G12DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G12DBVT SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G12DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G12DBVT SOT-23 DBV 6 250 180.0 180.0 18.0 TPS3808G12DBVT SOT-23 DBV 6 250 180.0 180.0 35.0 TPS3808G12DRVR SON DRV 6 250 180.0 203.0 203.0 35.0 TPS3808G12DRVR SON DRV 6 250 203.0 203.0 35.0 TPS3808G12DRVR SON DRV 6 250 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVT SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G15DBVT SOT-23 DBV 6 250 203.0 203.0 35.0 TPS3808G15DBVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G15DBVT SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G18DBVR SOT-23 DBV 6 3000 180.0 180.0 180.0 180.0 TPS3808G18DBVT SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G18DBVR SON DRV 6 3000 203.0 203.0 35.0 TPS3808G19DBVR SON-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G19DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G25DBVR SON DRV 6 250 203.0 203.0 35.0 TPS3808G30DBVR SOT-23 DBV 6 3000 180.0 180.0 180.0 180.0 TPS3808G30DBVR SOT-23 DBV 6 3000 203.0 203.0 35.0 TPS3808G30DBVR SOT-23 DBV 6 3000 180.0	TPS3808G01DRVT	SON	DRV	6	250	203.0	203.0	35.0
TPS3808G125DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G125DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G12DBVR         SOT-23         DBV         6         3000         180.0         180.0         180.0           TPS3808G12DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G12DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G12DRVR         SON         DRV         6         250         180.0         180.0         180.0           TPS3808G12DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G15DBVR         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DBVR         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DRVT         SON         DRV         6         3000         203.0         203.0         35.0	TPS3808G09DBVR	SOT-23	DBV	6	3000	180.0	180.0	18.0
TPS3808G125DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G12DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G12DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G12DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G12DRVT         SON         DRV         6         250         180.0         180.0         18.0           TPS3808G12DRVT         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G12DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G15DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         250         203.0         203.0         35.0	TPS3808G09DBVT	SOT-23	DBV	6	250	180.0	180.0	18.0
TPS3808G12DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G12DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G12DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G12DRVR         SON         DRV         6         250         180.0         180.0         18.0           TPS3808G12DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G12DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DRVT         SON         DRV         6         250         203.0         203.0         35.0           <	TPS3808G125DBVR	SOT-23	DBV	6	3000	203.0	203.0	35.0
TPS3808G12DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G12DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G12DBVT         SOT-23         DBV         6         250         180.0         180.0         180.0           TPS3808G12DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G12DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G18DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G18DRVT         SOT-23         DBV         6         250         180.0         180.0         18.0	TPS3808G125DBVT	SOT-23	DBV	6	250	203.0	203.0	35.0
TPS3808G12DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G12DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G12DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G12DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G15DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G15DRVT         SON         DRV         6         3000         180.0         180.0         18.0           TPS3808G18DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G18DRVR         SON         DRV         6         250         180.0         180.0         18.0	TPS3808G12DBVR	SOT-23	DBV	6	3000	180.0	180.0	18.0
TPS3808G12DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G12DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G12DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G15DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G18DBVR         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G18DBVT         SOT-23         DBV         6         3000         180.0         180.0         180.0           TPS3808G18DBVT         SOT-23         DBV         6         250         180.0         180.0         180.0         180.0         180.0         180.0         180.0         180.0         180.0         180.0         180.0         180.0         180.0	TPS3808G12DBVR	SOT-23	DBV	6	3000	203.0	203.0	35.0
TPS3808G12DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G12DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G15DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G15DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G18DBVR         SOT-23         DBV         6         3000         180.0         180.0         180.0           TPS3808G18DBVR         SOT-23         DBV         6         3000         180.0         180.0         180.0           TPS3808G18DBVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G19DBVR         SON         DRV         6         250         203.0         203.0         35.0	TPS3808G12DBVT	SOT-23	DBV	6	250	203.0	203.0	35.0
TPS3808G12DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G15DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G15DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G15DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G18DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G18DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G18DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G19DBVR         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0	TPS3808G12DBVT	SOT-23	DBV	6	250	180.0	180.0	18.0
TPS3808G15DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G15DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G15DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G18DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G18DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G18DBVT         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G19DBVR         SOT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G19DBVT         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0 <td>TPS3808G12DRVR</td> <td>SON</td> <td>DRV</td> <td>6</td> <td>3000</td> <td>203.0</td> <td>203.0</td> <td>35.0</td>	TPS3808G12DRVR	SON	DRV	6	3000	203.0	203.0	35.0
TPS3808G15DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G15DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G15DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G18DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G18DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G18DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G18DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G19DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G19DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G12DRVT	SON	DRV	6	250	203.0	203.0	35.0
TPS3808G15DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G15DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G18DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G18DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G18DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G18DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G19DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         180.0         180.0         180.0	TPS3808G15DBVR	SOT-23	DBV	6	3000	203.0	203.0	35.0
TPS3808G15DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G18DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G18DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G18DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G18DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G19DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G25DRVT         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0	TPS3808G15DBVT	SOT-23	DBV	6	250	203.0	203.0	35.0
TPS3808G18DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G18DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G18DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G18DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G19DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G25DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0	TPS3808G15DRVR	SON	DRV	6	3000	203.0	203.0	35.0
TPS3808G18BBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G18BRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G18DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G19DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G25DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         18.0           TPS3808G30DBV	TPS3808G15DRVT	SON	DRV	6	250	203.0	203.0	35.0
TPS3808G18DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G18DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G19DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G19DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G25DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0	TPS3808G18DBVR	SOT-23	DBV	6	3000	180.0	180.0	18.0
TPS3808G18DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G19DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G19DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G25DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         250         180.0         180.0         18.0           TPS3808G33DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0	TPS3808G18DBVT	SOT-23	DBV	6	250	180.0	180.0	18.0
TPS3808G19DBVR         SOT-23         DBV         6         3000         203.0         203.0         35.0           TPS3808G19DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G25DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         250         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G18DRVR	SON	DRV	6	3000	203.0	203.0	35.0
TPS3808G19DBVT         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G25DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G18DRVT	SON	DRV	6	250	203.0	203.0	35.0
TPS3808G25DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G25DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         250         180.0         180.0         18.0	TPS3808G19DBVR	SOT-23	DBV	6	3000	203.0	203.0	35.0
TPS3808G25DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         250         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G19DBVT	SOT-23	DBV	6	250	203.0	203.0	35.0
TPS3808G25DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G33DBVR         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G25DBVR	SOT-23	DBV	6	3000	180.0	180.0	18.0
TPS3808G25DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G33DBVR         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G25DBVT	SOT-23	DBV	6	250	180.0	180.0	18.0
TPS3808G30DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G30DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G30DBVR         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G25DRVR	SON	DRV	6	3000	203.0	203.0	35.0
TPS3808G30DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G30DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G33DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G25DRVT	SON	DRV	6	250	203.0	203.0	35.0
TPS3808G30DRVR         SON         DRV         6         3000         203.0         203.0         35.0           TPS3808G30DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G33DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G30DBVR	SOT-23	DBV	6	3000	180.0	180.0	18.0
TPS3808G30DRVT         SON         DRV         6         250         203.0         203.0         35.0           TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G33DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G30DBVT	SOT-23	DBV	6	250	180.0	180.0	18.0
TPS3808G33DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0           TPS3808G33DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G30DRVR	SON	DRV	6	3000	203.0	203.0	35.0
TPS3808G33DBVT         SOT-23         DBV         6         250         180.0         180.0         18.0           TPS3808G50DBVR         SOT-23         DBV         6         3000         180.0         180.0         18.0	TPS3808G30DRVT	SON	DRV	6	250	203.0	203.0	35.0
TPS3808G50DBVR SOT-23 DBV 6 3000 180.0 180.0 18.0	TPS3808G33DBVR	SOT-23	DBV	6	3000	180.0	180.0	18.0
	TPS3808G33DBVT	SOT-23	DBV	6	250	180.0	180.0	18.0
TPS3808G50DBVT SOT-23 DBV 6 250 180.0 180.0 18.0	TPS3808G50DBVR	SOT-23	DBV	6	3000	180.0	180.0	18.0
	TPS3808G50DBVT	SOT-23	DBV	6	250	180.0	180.0	18.0

## DBV (R-PDSO-G6)

## PLASTIC SMALL-OUTLINE PACKAGE

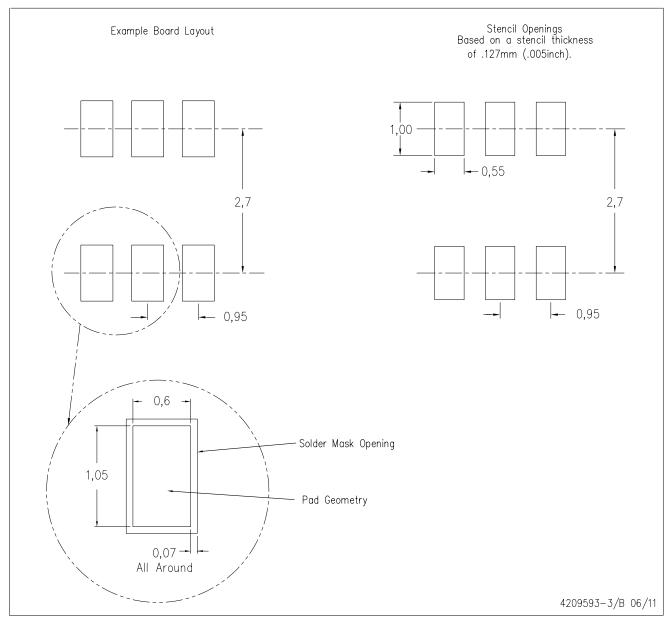


NOTES:

- A. All linear dimensions are in millimeters.
- B. This drawing is subject to change without notice.
- C. Body dimensions do not include mold flash or protrusion. Mold flash and protrusion shall not exceed 0.15 per side.
- D. Leads 1,2,3 may be wider than leads 4,5,6 for package orientation.
- Falls within JEDEC MO-178 Variation AB, except minimum lead width.



# DBV (R-PDSO-G6)



NOTES:

- A. All linear dimensions are in millimeters.
- B. This drawing is subject to change without notice.
- C. Customers should place a note on the circuit board fabrication drawing not to alter the center solder mask defined pad.
- D. Publication IPC-7351 is recommended for alternate designs.
- E. Laser cutting apertures with trapezoidal walls and also rounding corners will offer better paste release. Customers should contact their board assembly site for stencil design recommendations. Example stencil design based on a 50% volumetric metal load solder paste. Refer to IPC-7525 for other stencil recommendations.



DRV (S-PWSON-N6)

PLASTIC SMALL OUTLINE NO-LEAD



NOTES: A. All linear dimensions are in millimeters. Dimensioning and tolerancing per ASME Y14.5M-1994.

- B. This drawing is subject to change without notice.
- C. Small Outline No-Lead (SON) package configuration.

The package thermal pad must be soldered to the board for thermal and mechanical performance. See the Product Data Sheet for details regarding the exposed thermal pad dimensions.



## DRV (S-PWSON-N6)

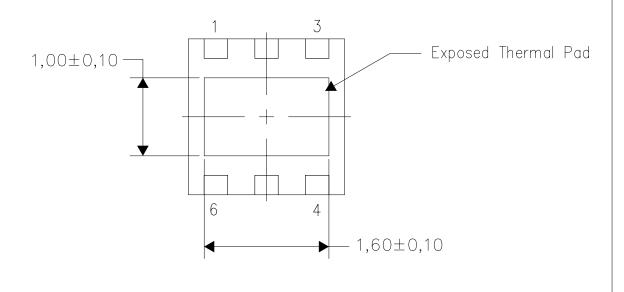
### PLASTIC SMALL OUTLINE NO-LEAD

#### THERMAL INFORMATION

This package incorporates an exposed thermal pad that is designed to be attached directly to an external heatsink. The thermal pad must be soldered directly to the printed circuit board (PCB). After soldering, the PCB can be used as a heatsink. In addition, through the use of thermal vias, the thermal pad can be attached directly to the appropriate copper plane shown in the electrical schematic for the device, or alternatively, can be attached to a special heatsink structure designed into the PCB. This design optimizes the heat transfer from the integrated circuit (IC).

For information on the Quad Flatpack No-Lead (QFN) package and its advantages, refer to Application Report, QFN/SON PCB Attachment, Texas Instruments Literature No. SLUA271. This document is available at www.ti.com.

The exposed thermal pad dimensions for this package are shown in the following illustration.



Bottom View

Exposed Thermal Pad Dimensions

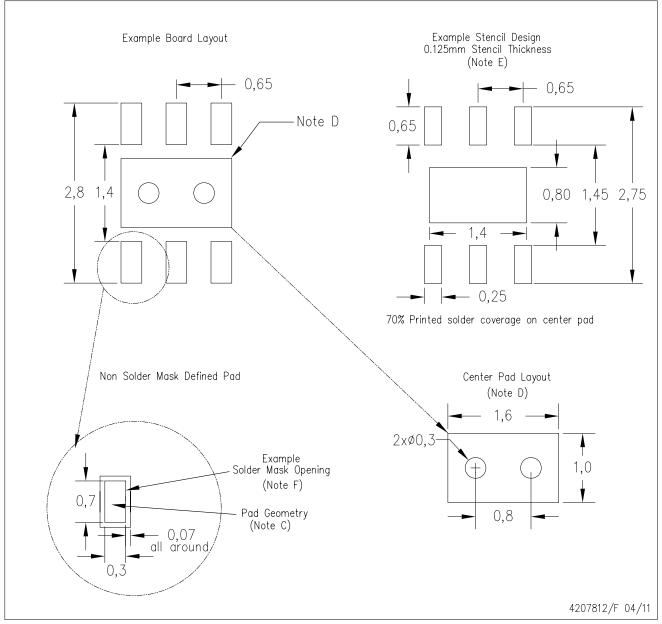
4206926/K 04/11

NOTE: A. All linear dimensions are in millimeters



## DRV (S-PWSON-N6)

## PLASTIC SMALL OUTLINE NO-LEAD



NOTES: A. All linear dimensions are in millimeters.

- B. This drawing is subject to change without notice.
- C. Publication IPC-7351 is recommended for alternate designs.
- D. This package is designed to be soldered to a thermal pad on the board. Refer to Application Note, QFN/SON PCB Attachment, Texas Instruments Literature No. SLUA271, and also the Product Data Sheets for specific thermal information, via requirements, and recommended board layout. These documents are available at www.ti.com <a href="http://www.ti.com">www.ti.com</a>.
- E. Laser cutting apertures with trapezoidal walls and also rounding corners will offer better paste release. Customers should contact their board assembly site for stencil design recommendations. Refer to IPC 7525 for stencil design considerations.
- F. Customers should contact their board fabrication site for solder mask tolerances.



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