

PD6NG-XXXXE2:1 1KV ISOLATED 1W REGULATED SINGLE OUTPUT SIP8

Electrical Specifications

(Typical at + 25°C , nominal input voltage, rated output current unless otherwise specified)

Input Specifications

Voltage range 4.5-9, 9-18, 18-36 and 36-72 VDC Wide Input
Filter Capacitor type

Isolation Specifications

Rated voltage 1000 VDC
Resistance >1 GΩ
Capacitance 65 PF

Output Specifications

Voltage accuracy +/- 2 % , typ.
Ripple and noise (at 20 MHz BW) 100 mV p-p, max.
Short circuit protection Continuous, auto restart
Line voltage regulation +/- 0.2 % typ.
Load voltage regulation +/- 0.5 % typ. load = 10 ~ 100%
Temperature coefficient +/- 0.02 % / °C

General Specifications

Efficiency Refer to the table
Switching frequency 75 KHz, typ.

Environmental Specifications

Operating temperature (ambient) - 40 °C to + 80 °C
Storage temperature - 55 °C to + 125 °C
Humidity Up to 90 % , non condensing
Cooling Free air convection

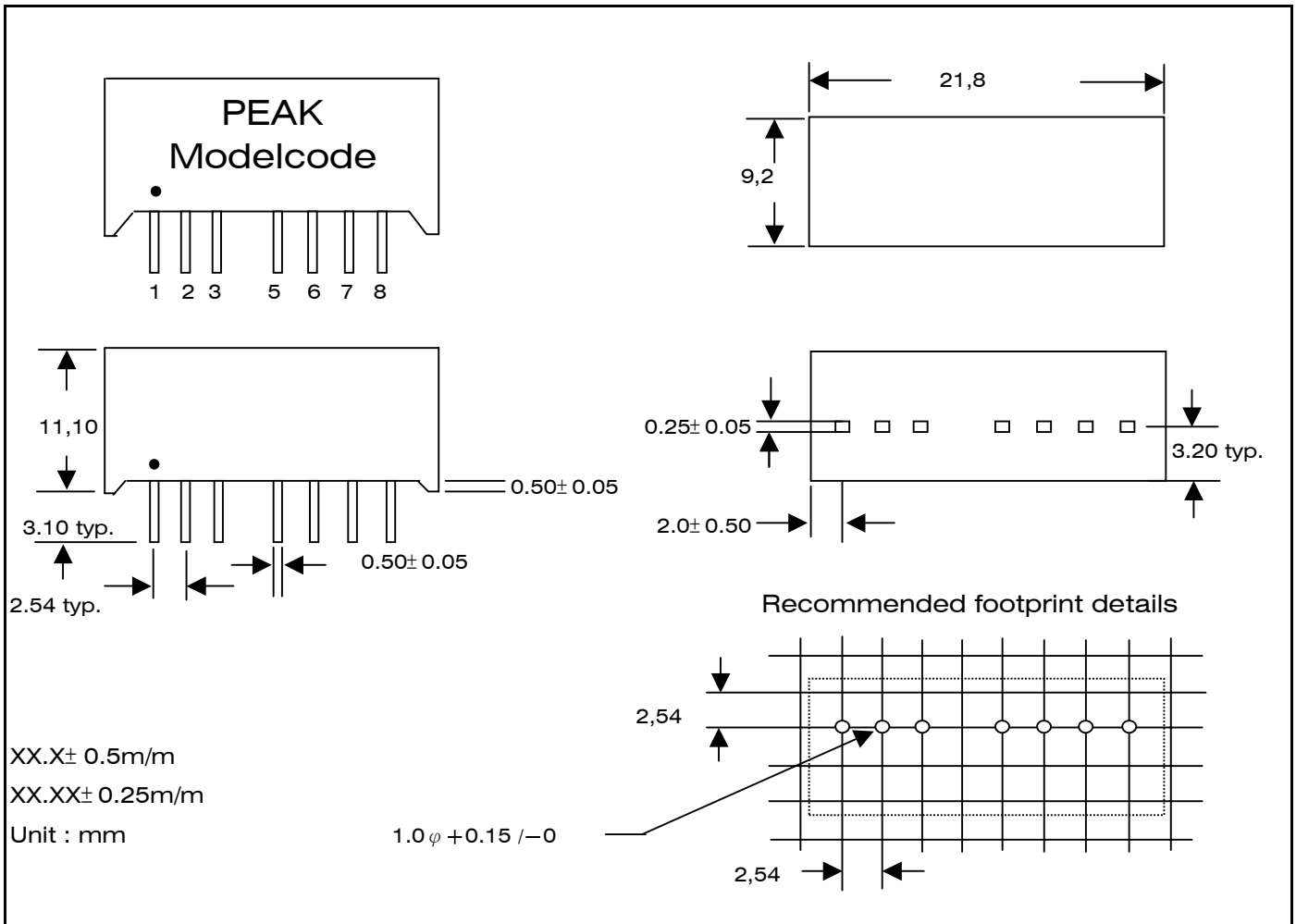
Physical Characteristics

Dimensions SIP 21.80 x 9.20 x 11.10 mm
Case material Non conductive black plastic

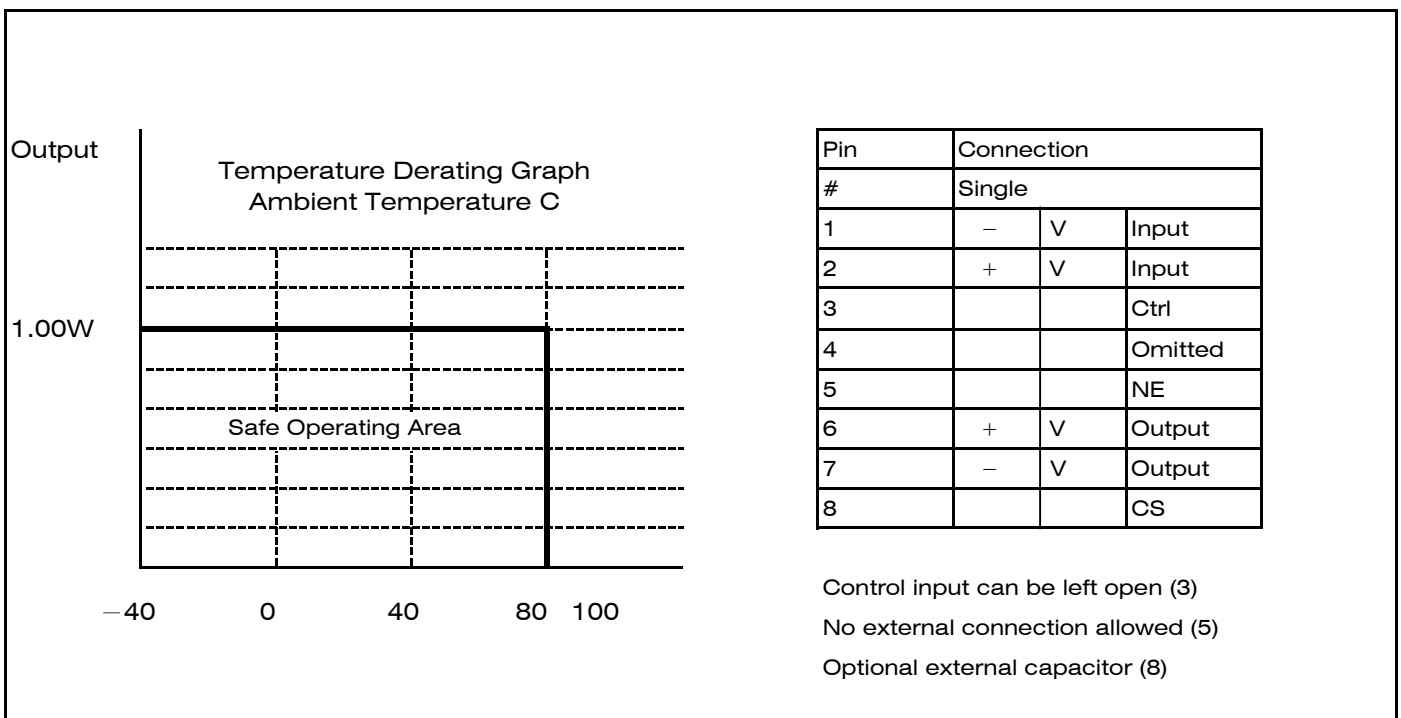
Samples of Partnumbers

PART NO.	INPUT VOLTAGE (VDC)	INPUT CURRENT NO LOAD (mA)	INPUT CURRENT FULL LOAD (mA)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (max.mA)	EFFICIENCY FULL LOAD (% TYP.)
PD6NG-053R3E2:1	4.5 - 9	24	243	3,3	303	68
PD6NG-0505E2:1	4.5 - 9	23	229	5	200	72
PD6NG-0509E2:1	4.5 - 9	23	229	9	111	72
PD6NG-0512E2:1	4.5 - 9	23	226	12	83	73
PD6NG-0515E2:1	4.5 - 9	22	222	15	66	74
PD6NG-0524E2:1	4.5 - 9	23	227	24	42	73
PD6NG-123R3E2:1	9 - 18	24	236	3,3	303	70
PD6NG-1205E2:1	9 - 18	13	111	5	200	74
PD6NG-1209E2:1	9 - 18	12	110	9	111	75
PD6NG-1212E2:1	9 - 18	11	106	12	83	78
PD6NG-1215E2:1	9 - 18	11	108	15	66	77
PD6NG-1224E2:1	9 - 18	11	110	24	42	76
PD6NG-243R3E2:1	18 - 36	7	58	3,3	303	71
PD6NG-2405E2:1	18 - 36	7	55	5	200	75
PD6NG-2409E2:1	18 - 36	8	55	9	111	75
PD6NG-2412E2:1	18 - 36	7	55	12	83	76
PD6NG-2415E2:1	18 - 36	6	53	15	66	78
PD6NG-2424E2:1	18 - 36	7	54	24	42	77
PD6NG-483R3E2:1	36 - 72	3	29	3,3	303	72
PD6NG-4805E2:1	36 - 72	4	27	5	200	76
PD6NG-4809E2:1	36 - 72	4	27	9	111	78
PD6NG-4812E2:1	36 - 72	3	27	12	83	78
PD6NG-4815E2:1	36 - 72	3	26	15	66	80
PD6NG-4824E2:1	36 - 72	3	26	24	42	80

Dimensions



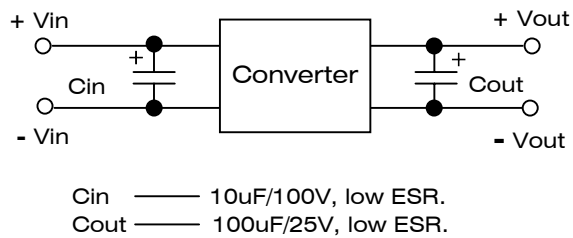
Derating Graph and Pinning



PD6NG-XXXXE2:1 1KV ISOLATED 1W REGULATED SINGLE OUTPUT SIP8

External capacitance:

These converters will work without external capacitors but they are necessary in order to guarantee the full line load range. All parts have been tested using the following recommended values.



Pin 8 (CS)

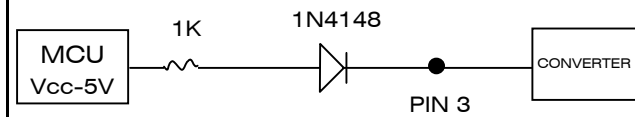
This pin provides a connection point to the main reservoir capacitor. Additional capacitance can be added from this to pin 7. Any low ESR capacitor will improve ripple and noise in some measure. Starting values can be in the range of 100uF.

Pin 3 (CTRL)

Control pin (ON/OFF)

Output starts at low or open and stops when high. Voltage applied via a limiting resistor and switching diode. The converter is in a low power mode during the high level phase.

Connection example



Pin 5 (NE)

This pin is used internally and must have no external connection.

Application Notes

Pin 3: The outside control connection. This pin provides the converter output ON/OFF, and the control common is referred to negative input.

Pin 5: This pin belongs to the secondary side. It just avoids someone to reverse the primary and secondary.

Pin 8: Max. 1000 uF

Specification can be changed without notice.

Copyright PEAK electronics GmbH

REV: 1 / 03.2003