



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**B05S
THRU
B10S**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE MINI SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 0.5 Ampere

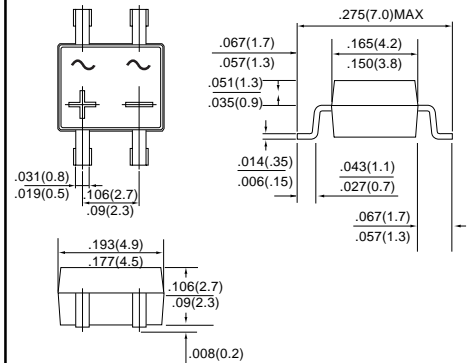
FEATURES

- * Surge overload rating - 30 Amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction
- * Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 0.22 gram

DB-1MS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

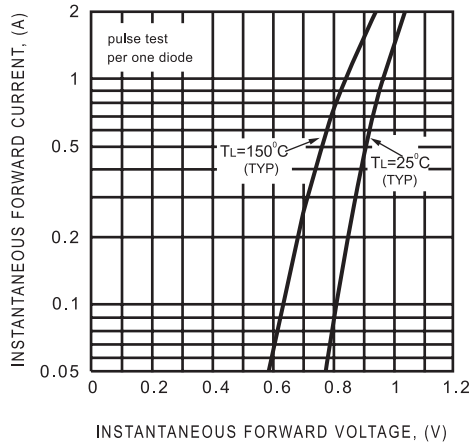
	SYMBOL	B05S	B1S	B2S	B4S	B6S	B8S	B10S	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at T _A = 40°C	I _O	0.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30							Amps
Maximum DC Forward Voltage Drop per Bridge Element at 0.5A DC	V _F	1.1							Volts
Maximum Reverse Current at rated DC Blocking Voltage per element	@ T _A = 25°C	5.0							uAmps
	@ T _A = 125°C	500							
I ² t Rating for Fusing (t<8.3ms)	I ² t	10							A ² Sec
Typical Junction Capacitance (Note1)	C _J	25							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	85							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

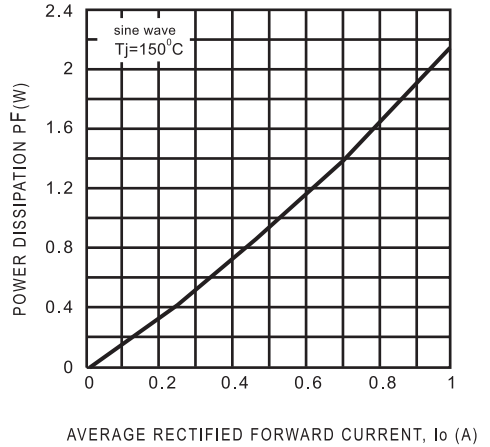
2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13x13mm) copper pads.

RATING AND CHARACTERISTIC CURVES (B05S THRU B10S)

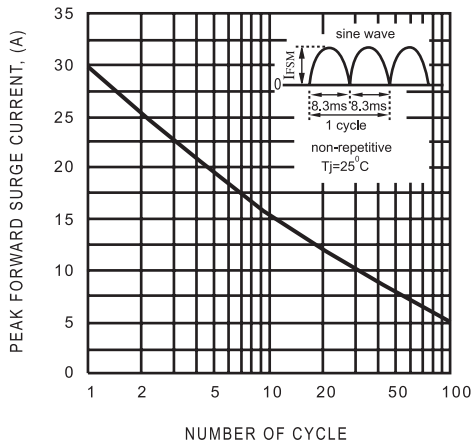
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



POWER DISSIPATION



SURGE FORWARD CURRENT CAPABILITY



TYPICAL FORWARD CURRENT DERATING CURVE

