

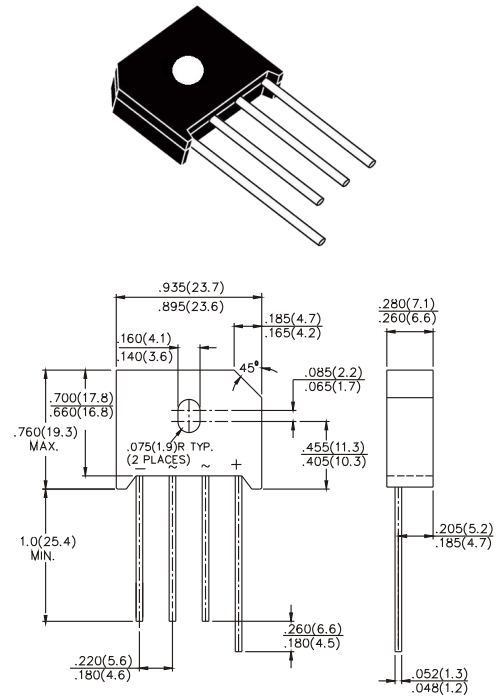
VOLTAGE RANGE: 50 - 1000V
CURRENT: 10 A

Features

- I Low cost
- I High forward surge current capability
- I Ideal for printed circuit board

Mechanical Data

- I Case: Transfer molded plastic
- I Terminal: Lead solderable per MIL-STD-202E method 208C
- I Polarity: Polarity symbols marked on case
- I Mounting: Thru hole for #6 screw, 5 in.-lbs torque max
- I Weight: 0.27 ounce, 7.59 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		Symbol	RS1001	RS1002	RS1003	RS1004	RS1005	RS1006	RS1007	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS 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 Rectified Output Current, at	T _C =50 (Note 2)	I _(AV)	10.0							Amps
	T _C =100 (Note 2)		8.0							
	T _A =45 (Note 3)		6.0							
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	350							Amps
Rating for Fusing (t<8.3ms)		I ² t	373							A ² s
Maximum Instantaneous Forward Voltage Drop per bridge element at 10.0A		V _F	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	T _A =25	I _R	5.0							μAmps
	T _A =100		1.0							mAmps
Typical Junction Capacitance (Note 1)		C _J	200							pF
Typical Thermal Resistance (Note 2)		R _{θJC}	5.0							℃ /W
Operating and Storage Temperature Range		T _J , T _{STG}	-55 to +150							℃

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 6.0 x 5.5 x 0.24 thick (15x14x0.6cm) Al. plate.
3. Unit mounted in free air, no heatsink, P.C.B at 0.375 (9.5mm) lead length with 0.5 x 0.5 (12x12cm) copper pads



FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

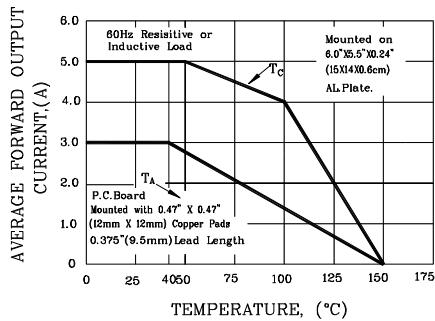


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

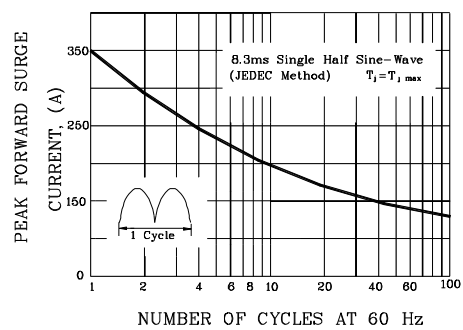


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

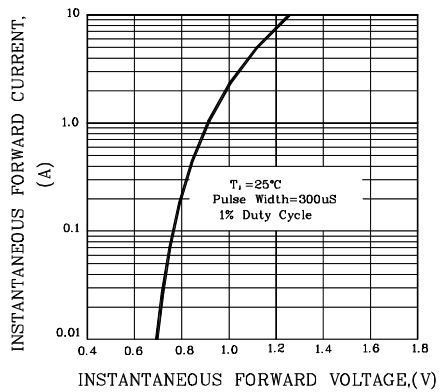


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

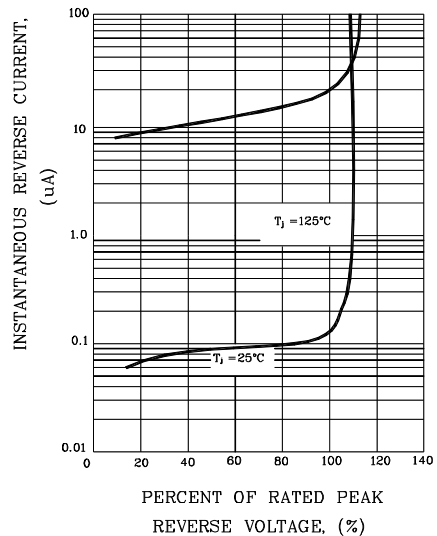


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

