

### GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 2.0 Amperes

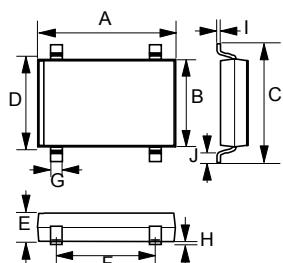
#### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- In compliance with EU RoHS 2002/95/EC directives

#### MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.02 ounces, 0.38 grams
- Mounting position : Any

#### SDIP



SDIP		
DIM.	MIN.	MAX.
A	8.05	8.51
B	6.20	6.50
C	9.40	10.4
D	7.40	7.90
E	3.15	3.40
F	5.00	5.20
G	0.89	1.14
H	.076	.330
I	.220	.250
J	1.02	1.53

All Dimensions in millimeter

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	DI 200S	DI 201S	DI 202S	DI 204S	DI 206S	DI 208S	DI 2010S	UNIT
Maximum recurrent peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @TA=40	IF					2.0			A
I <sup>2</sup> t Rating for fusing (t< 8.3mS)	I <sup>2</sup> t				10.4				A <sup>2</sup> sec
Peak forward surge current, single sine-wave superimposed on rated load (JEDEC method)	IFSM				60				A
Maximum instantaneous Forward Voltage Drop per element at 2.0A DC	V <sub>F</sub>				1.1				V
Maximum DC Reverse Current @TA=25 at Rated DC Blocking Voltage @TA=100	I <sub>R</sub>				5.0	500			uA
Typical junction capacitance per leg(note1 )	C <sub>J</sub>				25				pF
Typical Thermal Resistance Per leg (note2)	R <sub>JA</sub> R <sub>JC</sub>				40	15			/W
Operating & Storage Temperature Range	T <sub>J</sub> &T <sub>STG</sub>				-55 to +150				

note1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts

note2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.5x0.5" (13x13mm) copper pads.



BRIDGE OUTPUT FULL WAVE RECTIFIED CURRENT  
AVERSES AMPERES

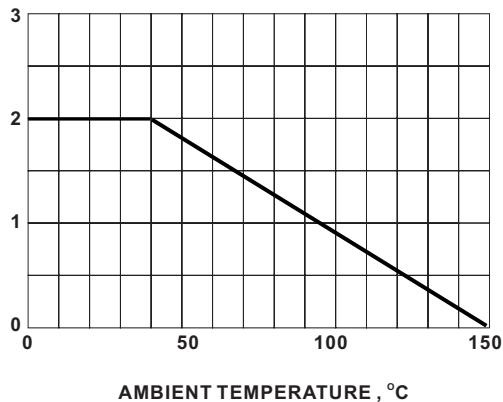


Fig.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

INSTANTANEOUS FORWARD CURRENT,  
AMPERES

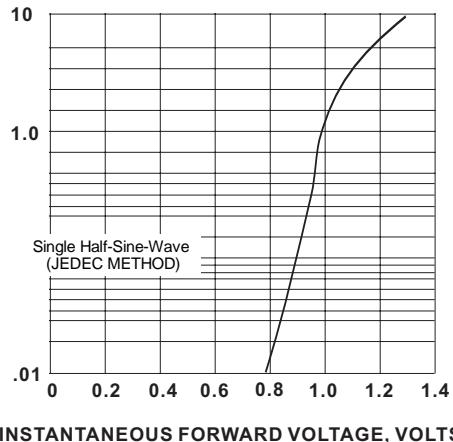


Fig.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

INSTANTANEOUS REVERSE CURRENT,  $\mu$ A

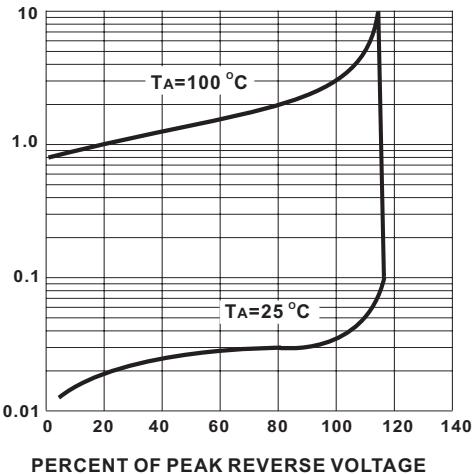


Fig.3 TYPICAL PEAK REVERSE CHARACTERISTICS

FORWARD SURGE CURRENT, AMPERES pk  
(HALF SINE-WAVE)

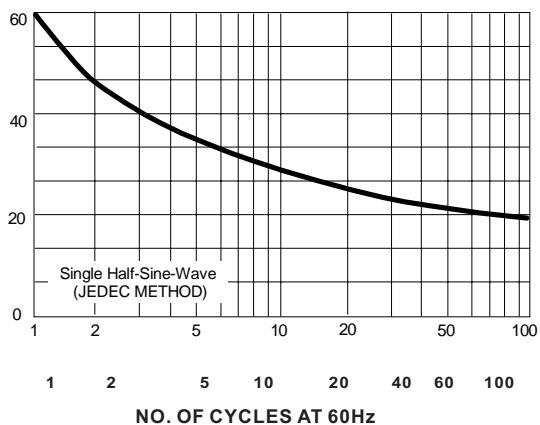


Fig.4 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT