



### SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 1000 Volts CURRENT 1.0 Amperes

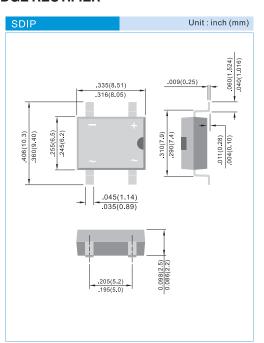
Recongnized File #E111753

#### **FEATURES**

- Plastic material used carries Underwriters Laboratory recognition 94V-O
- Low leakage
- Surge overload rating-- 30 amperes peak
- · Ideal for printed circuit board
- Exceeds environmental standards of MIL-S-19500/228
- Lead free in comply with EU RoHS 2002/95/EC directives

#### **MECHANICAL DATA**

- Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols molded or marking on body
- Mounting Position: Any
- Weight: 0.0105 ounce, 0.3 gram



### 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	DI100S	DI101S	DI102S	DI104S	DI106S	DI108S	DI1010S	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current T <sub>A</sub> =40°C	I <sub>F(AV)</sub>	1.0							А
Peak Forward Surge Current : 8.3ms single half sine- wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30							А
I <sup>2</sup> t Rating for fusing ( t<8.35ms)	l²t	3.735							A <sup>2</sup> S
Maximum Forward Voltage Drop per Bridge Element at 1.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current T <sub>A</sub> =25 °C at Rated DC Blocking Voltage T <sub>A</sub> =125 °C	I <sub>R</sub>	5.0 500							μА
Typical Junction capacitance (Note 1)	C J	25							pF
Typical thermal resistance per leg ((Note 2)	R <sub>eja</sub> R <sub>ejl</sub>	40 15						°C / W	
Operating Junstion and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150						°C	

#### NOTES:

- 1. Measured at 1.0 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"(13 X 13mm) copper pads

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## RATING AND CHARACTERISTIC CURVES

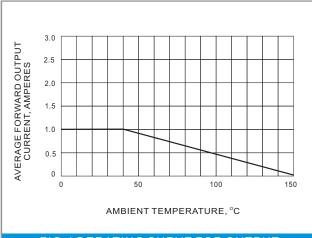


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

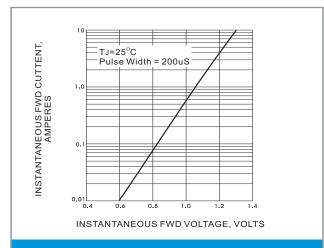


FIG.2 TYPICAL FORWARD CHARACTERISTICS

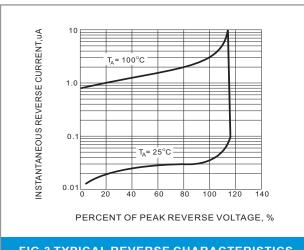


FIG.3 TYPICAL REVERSE CHARACTERISTICS

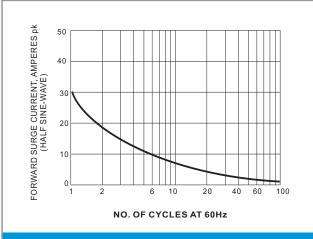


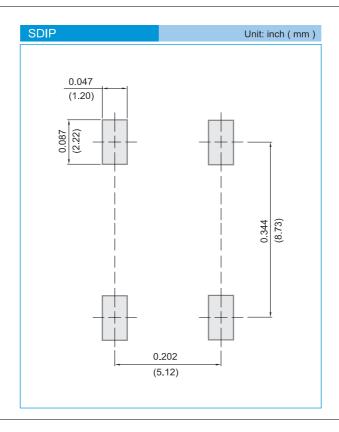
FIG.4 MAX NON-REPETITIVE SURGE CURRENT

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#### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

Packing information

T/R - 1.5K per 13" plastic Reel

### **LEGAL STATEMENT**

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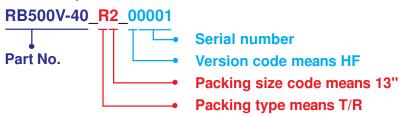
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## For example:



Packing Code XX			Version Code XXXXX				
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code	
T/B	A	N/A	0	HF	0	serial number	
T/R	R	7"	1	RoHS	1	serial number	
B/P	В	13"	2				
T/P	Т	26mm	X				
TRR	S	52mm	Y				
TRL	L	PBCU	U				
FORMING	F	PBCD	D				

# Part No\_packing code\_Version

DI100S\_R2\_00001

DI100S\_R2\_10001

DI100S\_T0\_00001

DI100S\_T0\_10001

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