



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

VOLTAGE 50 to 1000 Volts CURRENT 1.5 Amperes

Recongnized File #E111753

## FEATURES

- Plastic material used carries Underwriters Laboratory recognition 94V-O
- · Low leakage
- Surge overload rating-- 50 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

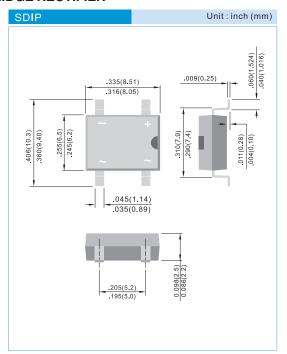
#### **MECHANICAL DATA**

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  $25\,^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, Resistive or inductive load. For capacitive load, derate current by 20%

				I					
PARAMETER	SYMBOL	DI150S	DI151S	DI152S	DI154S	DI156S	DI158S	DI1510S	UNITS
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 Current TA=40°C	lav	1.5							Α
Peak Forward Surge Current : 8.3ms single half sinewave superimposed on rated load (JEDEC method)	IFSM	50						Α	
I <sup>2</sup> t Rating for fusing ( t<8.35ms)	l²t	10							A²t
Maximum Forward Voltage Drop per Bridge Element at 1.0A	VF	1.1							V
Maximum DC Reverse Current TJ=25 °C at Rated DC Blocking VoltageTJ=125 °C	IR	5.0 500						μΑ	
Typical Junction capacitance (Note 1)	Cl	25						pF	
Typical thermal resistance per leg ((Note 2)	$R\theta_{JA}$ $R\theta_{JL}$	40 15						°C / W	
Operating and Storage Temperature Range	TJ	-50 to + 125							°C
Storage Temperature Range	TA	-50 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





### RATING AND CHARACTERISTIC CURVES

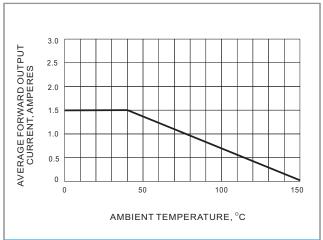


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

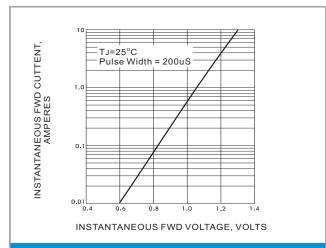


FIG.2 TYPICAL FORWARD CHARACTERISTICS

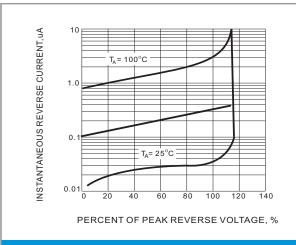


FIG.3 TYPICAL REVERSE CHARACTERISTICS

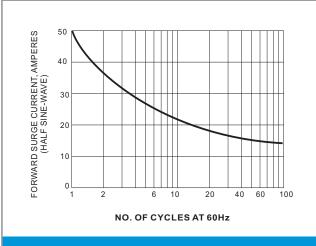
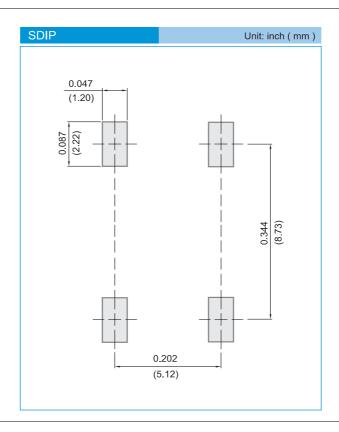


FIG.4 MAX NON-REPETITIVE SURGE CURRENT





#### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

Packing information

T/R - 1.5K per 13" plastic Reel

### LEGAL STATEMENT

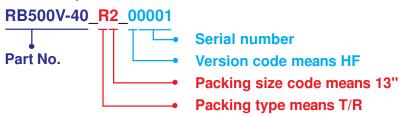
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## For example:



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	Υ				
TRL	L	PBCU	U				
FORMING	F	PBCD	D				

## Part No\_packing code\_Version

DI150S\_R2\_00001

DI150S\_R2\_10001

DI150S\_T0\_00001

DI150S\_T0\_10001