



### 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 G€FFÐ Í ÐÒWÁdirectives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

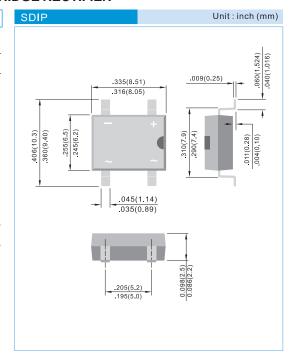


Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product

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	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							А
l <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	lr	5.0 500							μΑ
Typical Junction capacitance (Note 1)	Cı	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

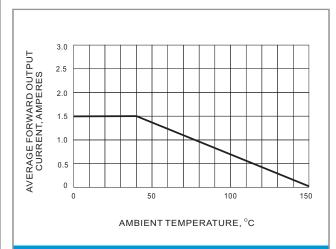


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

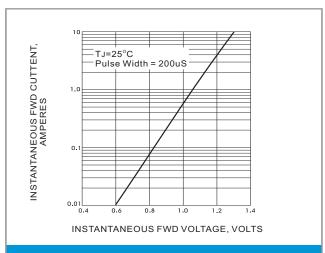


FIG.2 TYPICAL FORWARD CHARACTERISTICS

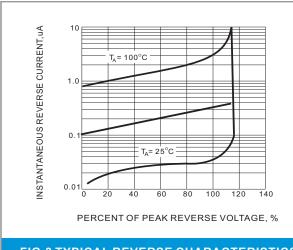


FIG.3 TYPICAL REVERSE CHARACTERISTICS

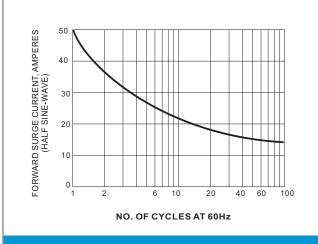
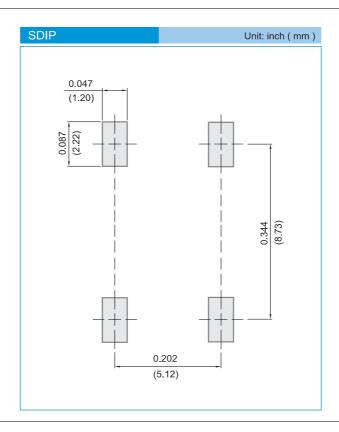


FIG.4 MAX NON-REPETITIVE SURGE CURRENT





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

• Packing information

T/R - 1.5K per 13" plastic Reel





### Part No\_packing code\_Version

DI150S\_R2\_00001 DI150S\_T0\_00001

### 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		
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number		
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number		
Bulk Packing (B/P)	В	13"	2					
Tube Packing (T/P)	Т	26mm	X					
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y					
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U					
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D					





### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties
  of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation.
   Customers are responsible in comprehending the suitable use in particular applications.
   Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.