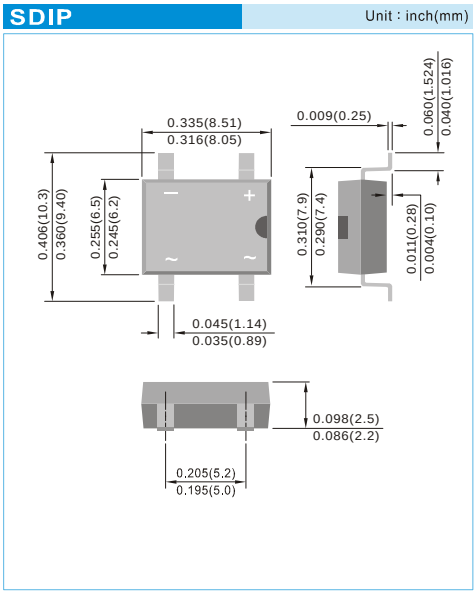
DI100S~DI1010S

SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 1 Ampere

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 compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

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
- Weight: 0.01058 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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current T_A=40°C	$I_{F(AV)}$	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30							A
I^2t Rating For Fusing (t<8.35ms)	I^2t	3.735							A^2S
Maximum Forward Voltage Drop per Bridge Element at 1A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A=25°C T_A=125°C	I_R	5 500							μA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance Per Leg (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	55 30							°C / W
Operating Junstion and Storage Temperature Range	T_J,T_{STG}	-55 to +150							°C

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
2. Mounted on a FR4 PCB, single-sided copper, with 100cm^2 copper pad area

DI100S~DI1010S

RATING AND CHARACTERISTIC CURVES

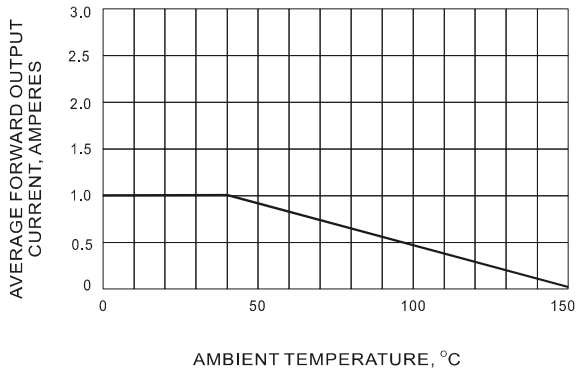


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

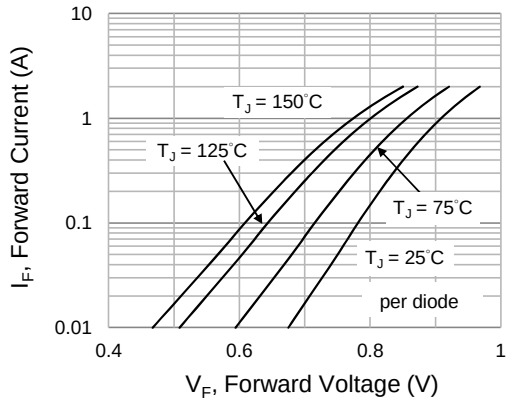


FIG.2 TYPICAL FORWARD CHARACTERISTICS

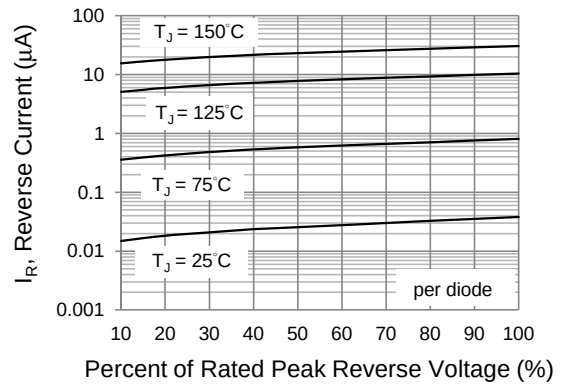


FIG.3 TYPICAL REVERSE CHARACTERISTICS

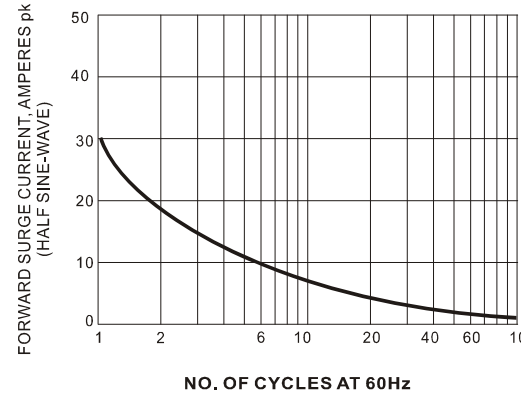
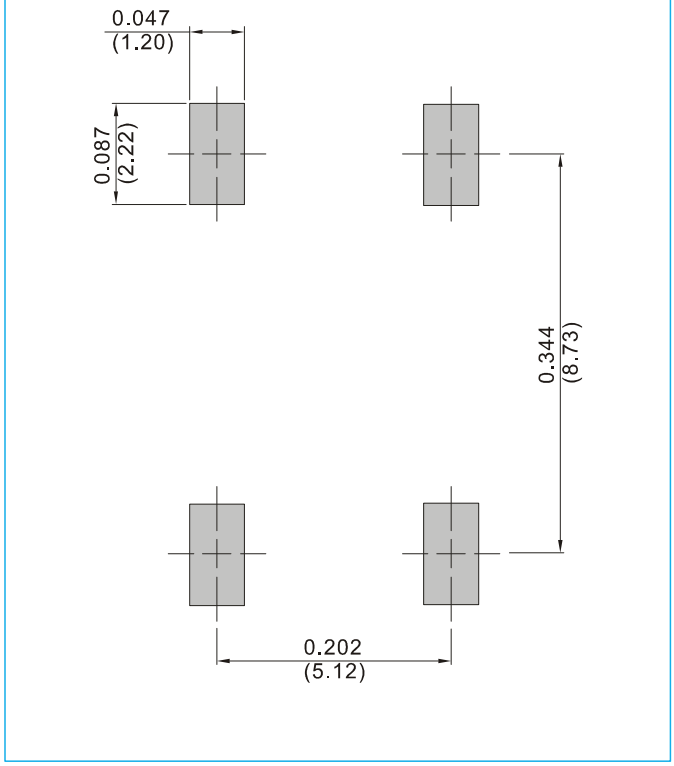


FIG.4 MAX NON-REPETITIVE SURGE CURRENT

DI100S~DI1010S

MOUNTING PAD LAYOUT

SDIP Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 1.5K per 13" plastic Reel

DI100S~DI1010S

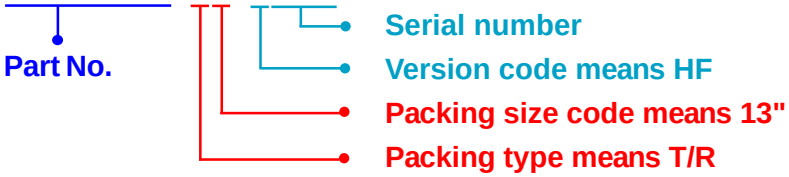
Part No_packing code_Version

DI100S_R2_00001

DI100S_T0_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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)	B	13"	2			
Tube Packing (T/P)	T	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			

DI100S~DI1010S

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.