

DI150S~DI1510S

SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 1.5 Ampere



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

MECHANICAL DATA

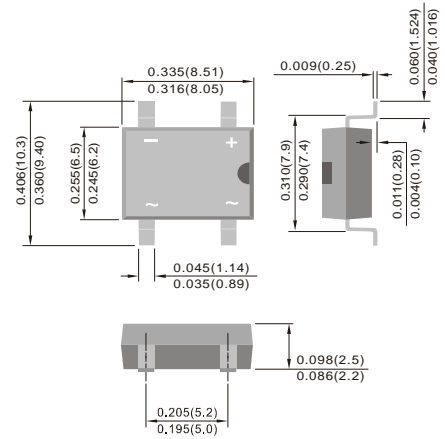
Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product

Terminals: Lead solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols molded or marking on body

Weight: 0.0105 ounce, 0.3 gram

SDIP Unit : inch(mm)



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	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 $T_A=40^{\circ}C$	I_{AV}	1.5							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50							A
I^2t Rating for fusing ($t < 8.35ms$)	I^2t	10							A ² t
Maximum Forward Voltage Drop per Bridge Element at 1A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I_R	5 500							μA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	40 15							$^{\circ}C / W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							$^{\circ}C$

NOTES :

1. Measured at 1 MHz and applied reverse voltage of 4 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

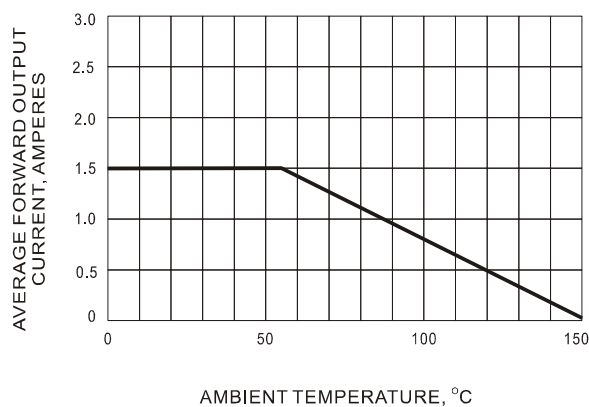


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

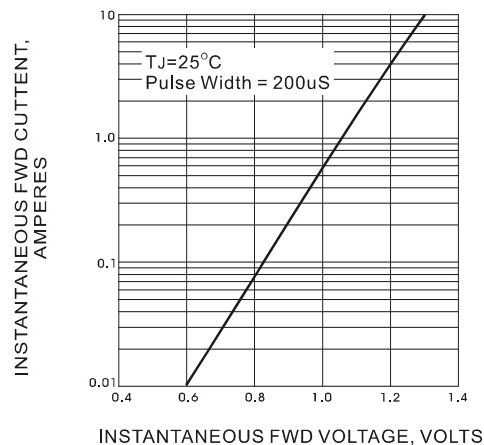


FIG.2 TYPICAL FORWARD CHARACTERISTICS

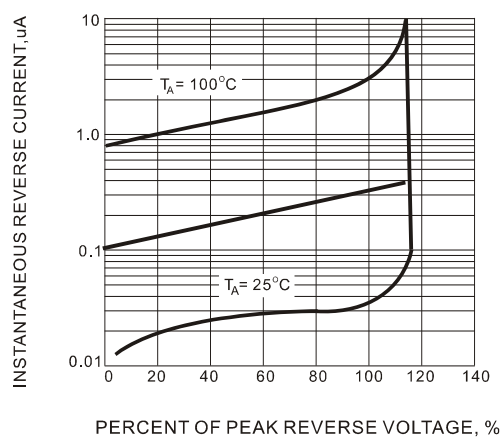


FIG.3 TYPICAL REVERSE CHARACTERISTICS

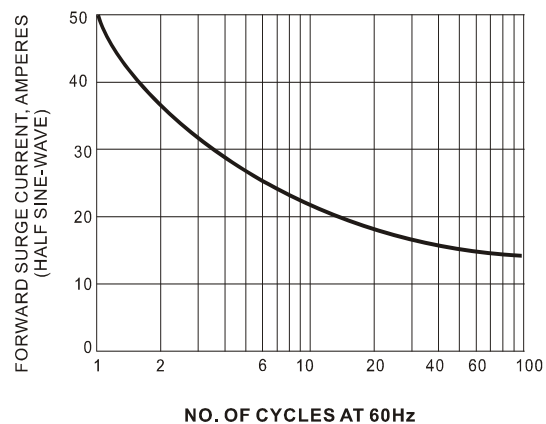


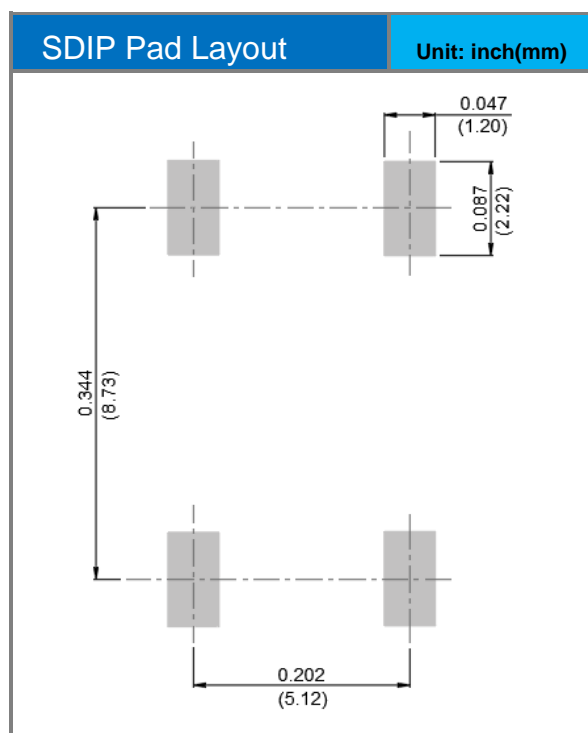
FIG.4 MAX NON-REPETITIVE SURGE CURRENT

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
DI150S	SDIP	1.5K pcs / 13" reel	DI150S
DI151S	SDIP	1.5K pcs / 13" reel	DI151S
DI152S	SDIP	1.5K pcs / 13" reel	DI152S
DI154S	SDIP	1.5K pcs / 13" reel	DI154S
DI156S	SDIP	1.5K pcs / 13" reel	DI156S
DI158S	SDIP	1.5K pcs / 13" reel	DI158S
DI1510S	SDIP	1.5K pcs / 13" reel	DI1510S

Mounting Pad Layout



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