



# DATA SHEET

## DI100S~DI1010S

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

**VOLTAGE** 50 to 1000 Volts **CURRENT** 1.0 Amperes

**SDIP** Unit : inch (mm)



Recognized File #E111753

#### FEATURES

- Plastic material used carries Underwriters Laboratory recognition 94V-0
- Low leakage
- Surge overload rating-- 30 amperes peak
- Ideal for printed circuit board
- Exceeds environmental standards of MIL-S-19500/228
- In compliance with EU RoHS 2002/95/EC directives

#### MECHANICAL DATA

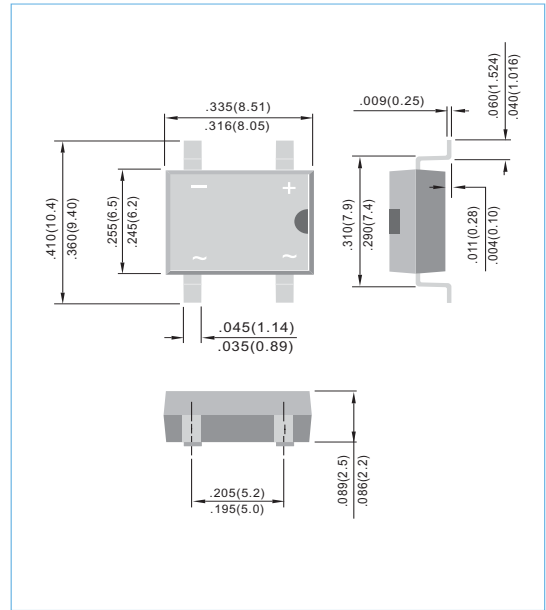
Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product

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

Polarity: Polarity symbols molded or marking on body

Mounting Position: Any

Weight: 0.02 ounce, 300mg



#### 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%

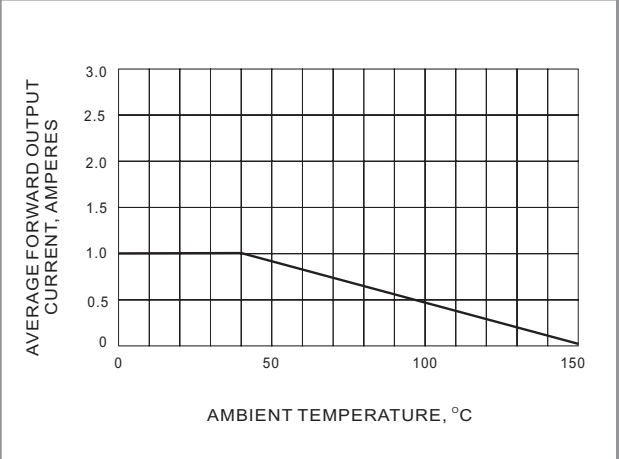
PARAMETER	SYMBOL	DI100S	DI101S	DI102S	DI104S	DI106S	DI108S	DI1010S	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current TA=40°C	I <sub>AV</sub>	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30							A
Ft Rating for fusing ( t<8.35ms)	Pt	3.735							A²t
Maximum Forward Voltage Drop per Bridge Element at 1.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current TA=25 °C at Rated DC Blocking Voltage TA=125 °C	I <sub>R</sub>	5.0 500							µA
Typical Junction capacitance (Note 1)	C <sub>J</sub>	25							pF
Typical thermal resistance per leg ((Note 2)	RθJA RθJL	40 15							°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

#### NOTES:

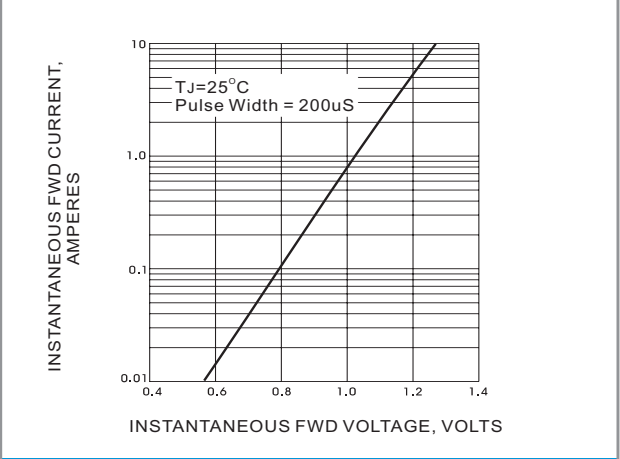
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 X 0.5"(13 X 13mm) copper pads



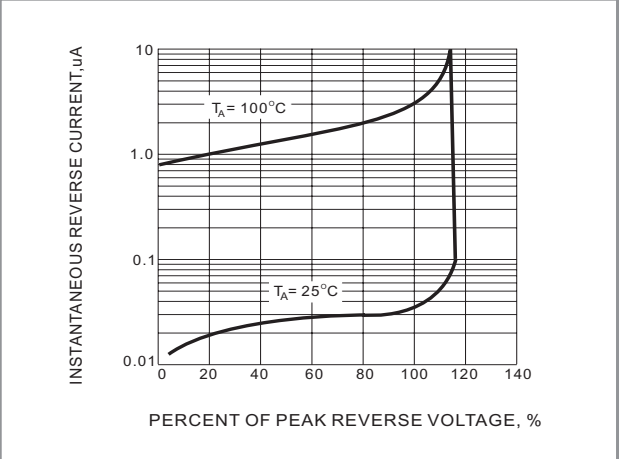
**RATING AND CHARACTERISTIC CURVES**



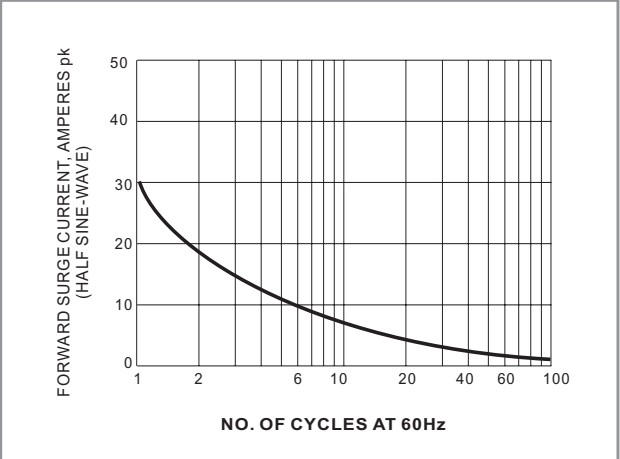
**FIG. 1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG. 2 TYPICAL FORWARD CHARACTERISTICS**



**FIG. 3 TYPICAL REVERSE CHARACTERISTICS**



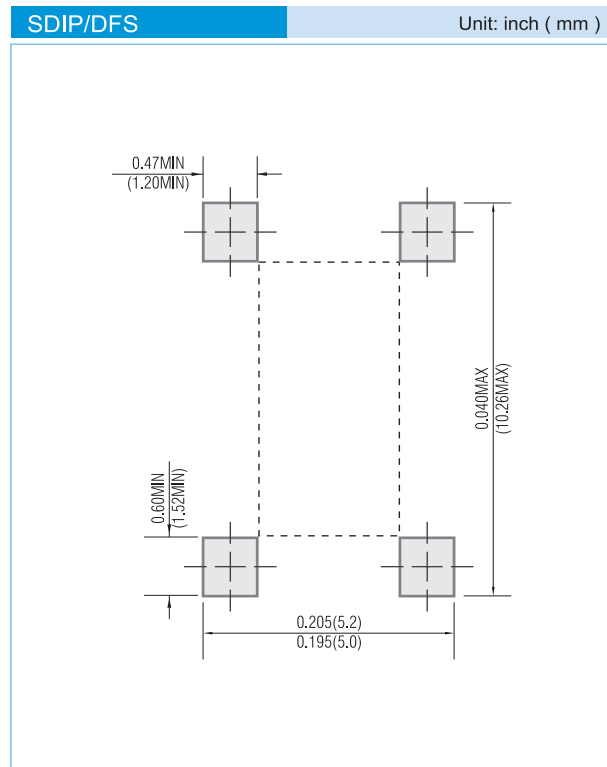
**FIG. 4 MAX NON-REPETITIVE SURGE CURRENT**




---

## MOUNTING PAD LAYOUT

---




---

## ORDER INFORMATION

---

- Packing information  
T/R - 1.5K per 13" plastic Reel

---

## LEGAL STATEMENT

---

### Copyright PanJit International, Inc 2007

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.