



SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

1 Ampere

VOLTAGE 50 to 1000 Volt CURRENT

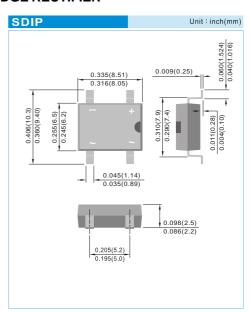
Recongnized File #E111753

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 | | DI100S | DI101S | DI102S | DI104S | DI106S | DI108S | DI1010S | UNITS |
|--|---------------------------------------|-------------|--------|--------|--------|--------|--------|---------|------------------|
| Maximum Recurrent Peak Reverse Voltage | | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | ٧ |
| 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 | ٧ |
| Maximum Average Forward Current T _A =40°C | I _{F(AV)} | 1 | | | | | | | Α |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 30 | | | | | | | А |
| I ² t Rating For Fusing (t<8.35ms) | l²t | 3.735 | | | | | | | A ² S |
| Maximum Forward Voltage Drop per Bridge Element at 1A | | 1.1 | | | | | | | ٧ |
| Maximum DC Reverse Current at Rated DC Blocking $T_A = 25^{\circ}C$ Voltage $T_A = 125^{\circ}C$ | I _R | 5 500 | | | | | μА | | |
| Typical Junction Capacitance (Note 1) | CJ | 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 100cm² copper pad area





RATING AND CHARACTERISTIC CURVES

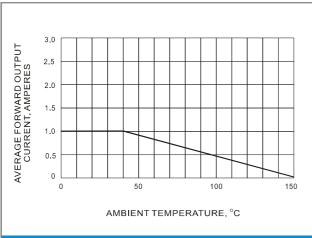


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

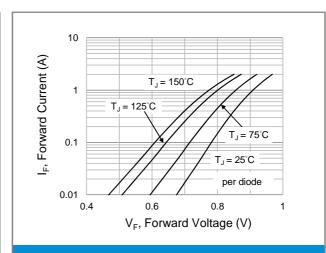


FIG.2 TYPICAL FORWARD CHARACTERISTICS

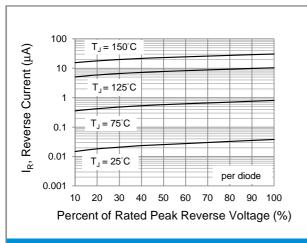


FIG.3 TYPICAL REVERSE CHARACTERISTICS

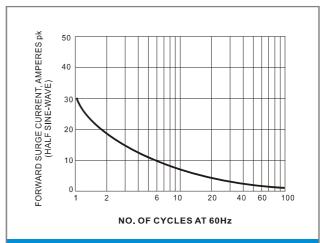
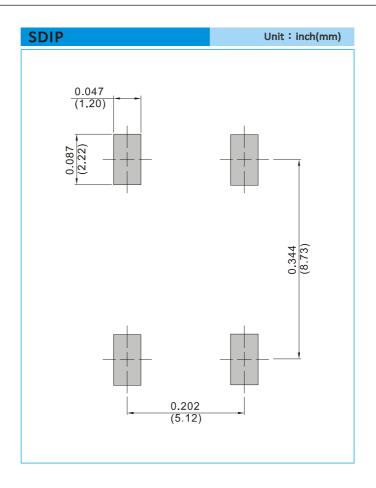


FIG.4 MAX NON-REPETITIVE SURGE CURRENT





MOUNTING PAD LAYOUT



ORDER INFORMATION

• Packing information

T/R - 1.5K per 13" plastic Reel





Part No_packing code_Version

DI100S_R2_00001 DI100S_T0_00001

For example:



| Packing Code XX | | | Version Code XXXXX | | | | |
|--------------------------------------|----------------------|-----------------------------------|----------------------|------------|----------------------|---------------------------------------|--|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th 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 | Х | | | | |
| 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 | | | | |





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