

GLASS PASSIVATED BRIDGE RECTIFIERS

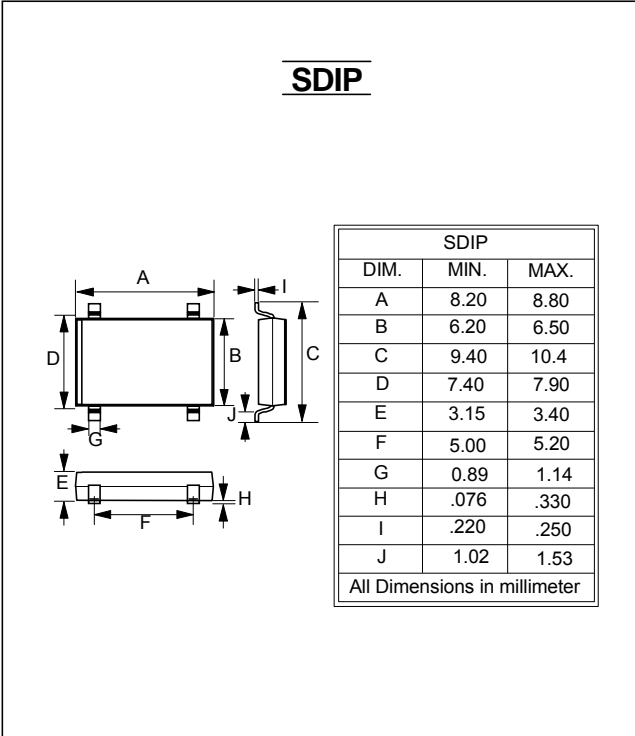
REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 1.5 Amperes

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.02 ounces, 0.3 grams
- Mounting position : Any



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 | DI 150S | DI 151S | DI 152S | DI 154S | DI 156S | DI 158S | DI 1510S | UNIT |
|--|------------------|-------------|---------|---------|---------|---------|---------|----------|--------------------|
| 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 rectified current @TA=40 | IF | 1.5 | | | | | | | A |
| I ² t Rating for fusing (t< 8.3mS) | I ² t | 10 | | | | | | | A ² sec |
| Peak forward surge current, single sine-wave superimposed on rated load (JEDEC method) | IFSM | 50 | | | | | | | A |
| Maximum instantaneous Forward Voltage Drop per element at 1.0A DC | VF | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @TA=25 at Rated DC Blocking Voltage @TA=100 | IR | 5.0 500 | | | | | | | uA |
| Typical junction capacitance per leg(note1) | CJ | 25 | | | | | | | pF |
| Typical Thermal Resistance Per leg (note2) | RJA RJC | 40 15 | | | | | | | /W |
| Operating & Storage Temperature Range | TJ&TSTG | -55 to +150 | | | | | | | |

note1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts

note2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.5x0.5" (13x13mm) copper pads.

FIG.1 - FORWARD CURRENT DERATING CURVE

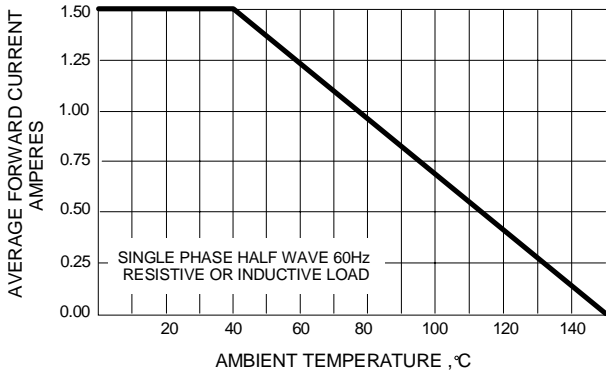


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

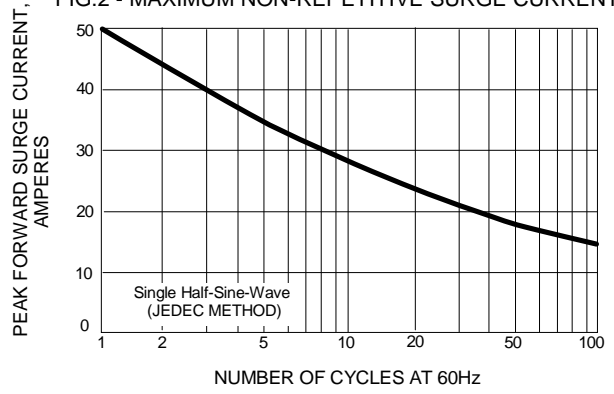


FIG.3 - TYPICAL JUNCTION CAPACITANCE

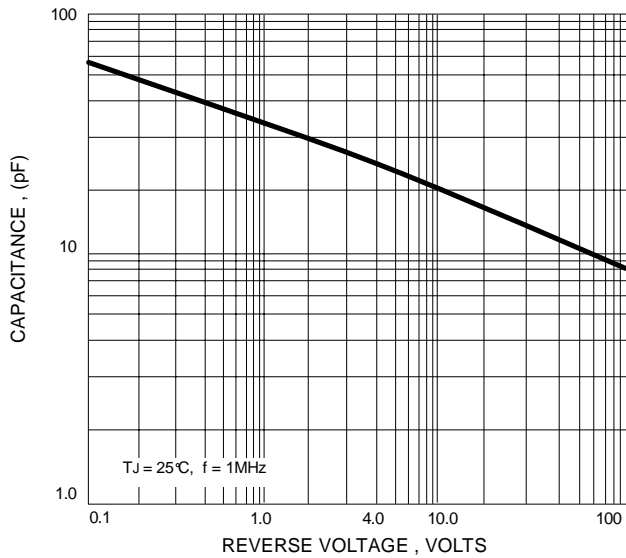


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

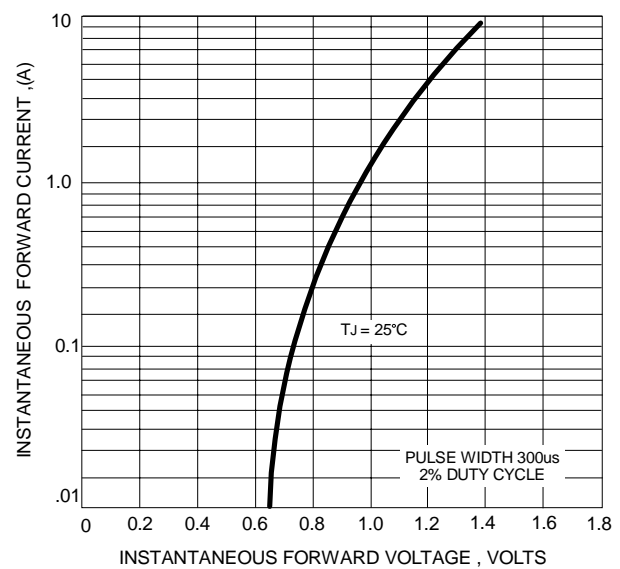


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

