



1S2~1S10

SCHOTTKY BARRIER RECTIFIERS

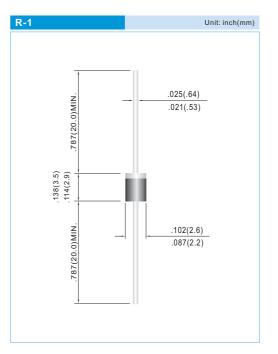
VOLTAGE 20 to 100 Volts CURRENT 1.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory
 Flammability Classification 94V-O utilizing
 Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANICALDATA

- Case: R-1 Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.0068 ounces, 0.1937 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

| PARAMETER | SYMBOL | 1S2 | 1S3 | 1S4 | 1S5 | 1S6 | 1S8 | 1S10 | UNITS |
|---|--------------------|-------------------------|-----------|------|-----|------|-----|--------|-------|
| Maximum Recurrent Peak Reverse Voltage | | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum RMS Voltage | | 14 | 21 | 28 | 35 | 42 | 56 | 70 | ٧ |
| Maximum DC Blocking Voltage | | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum Average Forward Rectified Current .375"(9.5mm) lead length (See Firure 1) | I _{F(AV)} | 1.0 | | | | | | | А |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | I _{FSM} | 30 | | | | | | | Α |
| Maximum Forward Voltage at 1.0A | V _F | 0.50 | | 0.70 | | 0.85 | | V | |
| Maximum DC Reverse Current T _J =25°C at Rated DC Blocking Voltage T _J =100°C | I _R | | 0.2 10 | | | | | | m A |
| Typical Thermal Resistance | R _{eJA} | 60 | | | | | | °C / W | |
| Operating Junction and Storage Temperature Rang | T_J, T_{STG} | -55 to +125 -55 to +150 | | | | | | °C | |

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RATING AND CHARACTERISTIC CURVES

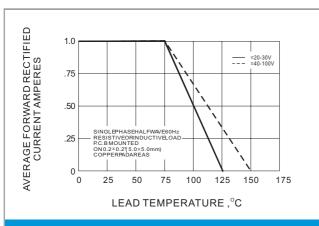


Fig.1-FORWARD CURRENT DERATING CURVE

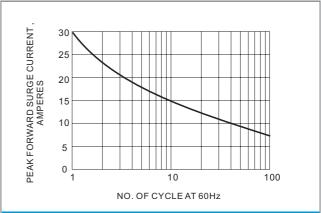


Fig.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

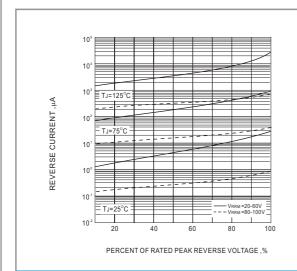


Fig.3-TYPICAL REVERSE CHARACTERISTIC

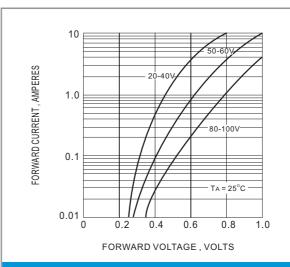


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC





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Part No_packing code_Version

1S2_AX_00001

1S2_AX_10001

1S2_AY_00001

1S2_AY_10001

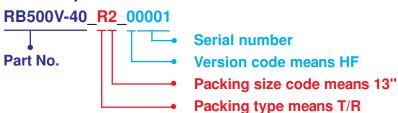
1S2_B0_00001

1S2_B0_10001

1S2_R2_00001

1S2_R2_10001

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) | Α | 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 | 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 | | | | | | |





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