

Pb Free Plating Product

MB12S thru MB110S



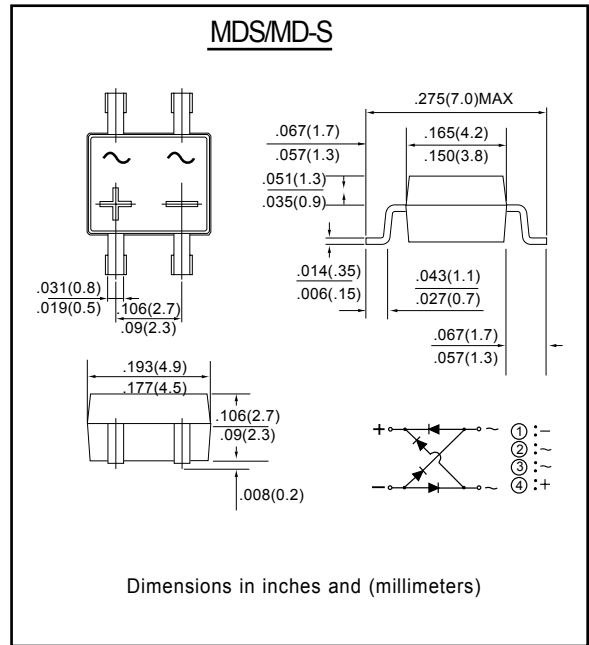
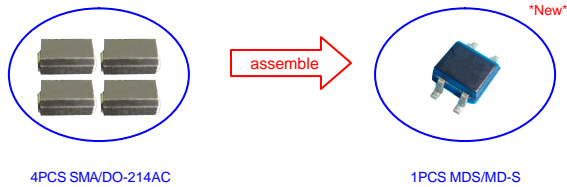
1.0 Ampere Surface Mount MDS/MD-S Schottky Bridge Rectifiers

FEATURES

- Surge overload rating - 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded
- Schottky barrier rectifier diode chip device
- Polarity symbols molded on body

MECHANICAL DATA

- Case : MDS/MD-S Package, Molded Plastic
- Epoxy : Device has UL flammability classification 94V-0
- Mounting Position : Any
- Weight : 0.22 grams (approx.)
- Marking : Type Number



Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

| Parameter | Symbol | MB12S | MB14S | MB16S | MB18S | MB110S | Unit |
|---|-----------------|-------------|-------|-------|-------|--------|-----------------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 40 | 60 | 80 | 100 | V |
| Maximum RMS voltage | V_{RMS} | 14 | 28 | 42 | 56 | 70 | V |
| Maximum DC blocking voltage | V_{DC} | 20 | 40 | 60 | 80 | 100 | V |
| Maximum Average forward output current | $I_{F(AV)}$ | 1.0 | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30 | | | | | A |
| Maximum instantaneous forward voltage at 1.0A | VF | 0.50 | | 0.70 | | 0.85 | V |
| Maximum DC reverse current at rated DC blocking voltage per leg | I_R | 0.5 | | | | | mA |
| | | 20 | | | | | |
| Typical thermal resistance per leg(Note1) | $R_{\theta JA}$ | 88 | | | | | $^{\circ}\text{C}/\text{W}$ |
| | $R_{\theta JL}$ | 28 | | | | | |
| Operation junction temperature range | T_J | -55 to +150 | | | | | $^{\circ}\text{C}$ |
| Storage temperature range | T_{STG} | -55 to +150 | | | | | $^{\circ}\text{C}$ |

Notes: 1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2"(5.0×5.0mm) copper pad areas.

Fig.1 Forward Current Derating Curve

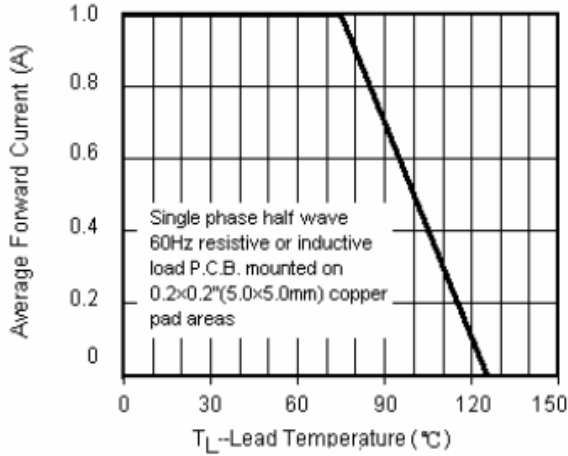


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

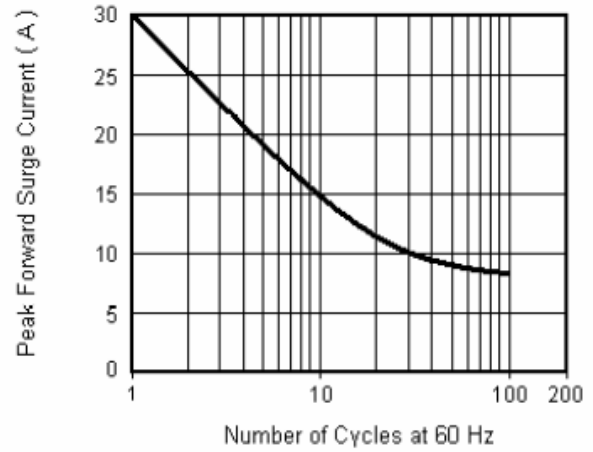


Fig.3 Typical Instantaneous Forward Characteristics

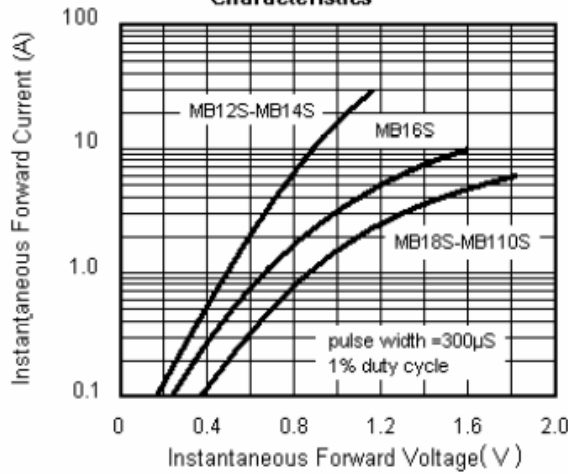


Fig.4 Typical Junction Capacitance

