



DATA SHEET

MMBD770WS

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 70 Volts CURRENT 250mA

FEATURES

- · Extremely low minority carrier lifetime
- Low capacitance (0.4pF @ 20V typical)
- Low reverse leakage (30nA @ 35V typical)
- Surface mount package ideally suited for automatic insertion
- · Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

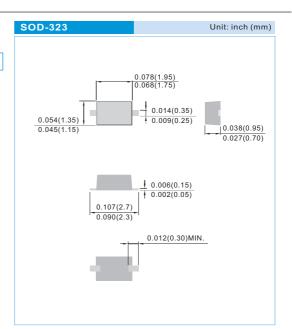
MECHANICAL DATA

Case: SOD-323, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.0048 gram

Marking: 770



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| PARAMETER | SYMBOL | VALUE | UNIT |
|----------------------------------------------|-------------------|------------|------|
| Maximum Reverse Voltage | V _R | 70 | ٧ |
| Peak Reverse Voltage | V_{RRM} | 70 | V |
| Continuous Forward Current | I _F | 0.25 | Α |
| Power Dissipation ⁽¹⁾ | P _{TOT} | 180 | mW |
| Thermal Resistance , Junction to Ambient (1) | R _{QJ A} | 556 | /W |
| Junction Temperature | TJ | -55 to 125 | |
| Storage Temperature | T _{STG} | -55 to 150 | |

Notes: 1. FR-4 Board = $70 \times 60 \times 1$ mm.

ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---------------------------|-------------------|---------------------------------------------|------|------|------------|------|
| Reverse Breakdown Voltage | V _(BR) | I _R =10uA | 70 | - | - | V |
| Reverse Current | I _R | V _R =35V | - | - | 0.2 | uA |
| Forward Voltage | V _F | I _F =1mA I _F =10mA | - | - | 0.5 1.0 | V |
| Typical Capacitance | C _T | V _R =20V, f=1MHz | - | - | 1.0 | pF |





CHARACTERISTIC CURVES

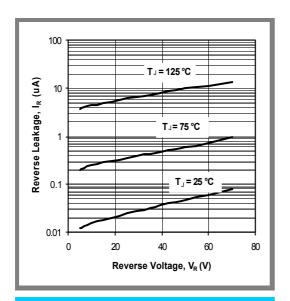


Fig. 1. Typical Reverse Leakage

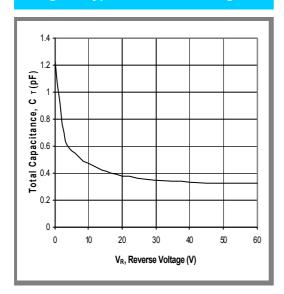


Fig. 3. Typical Total Capacitance

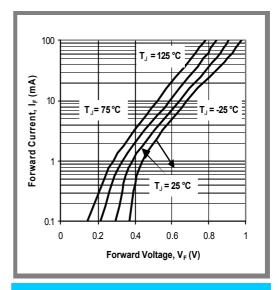
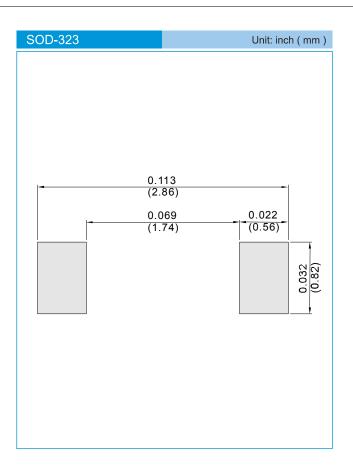


Fig. 2. Typical Forward Voltage





MOUNTING PAD LAYOUT



ORDER INFORMATION

Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel





MMBD770WS

Part No_packing code_Version

MMBD770WS_R1_00001 MMBD770WS_R2_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) | 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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