Comchip
SMD Diode Specialist

New Product Announcement

CDBMT220-HF Thru. CDBMT2100-HF

# Low Profile SMD Schottky Barrier Rectifiers

**Package: SOD-123H / MINI SMA (Molded Plastic)**

**Reverse Voltage: 20 to 100 Volts**

**Forward Current: 2.0 Amps**

**RoHS Device**

**Halogen Free**

**Excellent power dissipation offers better reverse leakage current and thermal resistance**

**Low profile package is 40% thinner than standard SOD-123 package**

**Low power loss, high efficiency**

**High current capability, low forward voltage drop.**

**High surge capability**

**Guarding for over voltage protection**

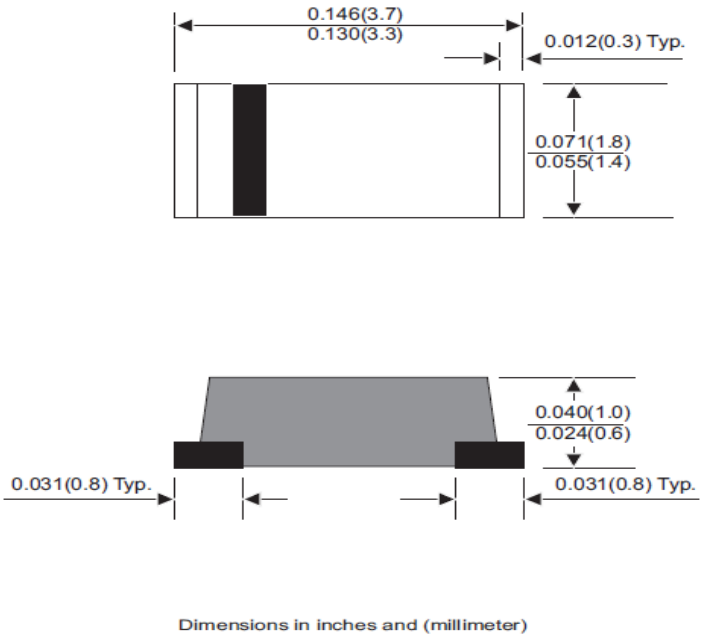
**Ultra high-speed switching**

**Silicon epitaxial planar chip, metal silicon junction.**

**Lead-free part meets environmental standards of MIL-STD-19500/228**

Comchip's CDBMT Schottky barrier rectifier series utilizes the low profile flat chip SOD-123H (MINI SMA) package. The SOD-123H measures just: 1.6mm(w) x 3.5mm(l) x 0.8mm(h). The slim package design makes the CDBMT series ideal for components of DC power supplies and high-voltage direct current power transmission systems. With today's market demanding smaller and thinner products, Comchip is striving to exceed market demands with quality products at a conveniently low price. With a forward current of 2 amps, reverse voltage applications range from 20 to 100 volts.

**SOD-123H**




Dimensions in inches and (millimeter)

**Epoxy: UL94-V0 rated flame retardant**

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

**Polarity: Indicated by cathode band**

**Mounting Position: Any**

**Weight: 0.011 grams**



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## Maximum Ratings (at $T_A$=25 °C unless otherwise noted)

| Parameter | | Symbol | CDBMT 220-HF | CDBMT 230-HF | CDBMT 240-HF | CDBMT 250-HF | CDBMT 260-HF | CDBMT 280-HF | CDBMT 2100-HF | Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| Repetitive peak reverse voltage | | $V_{RRM}$ | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Continuous reverse voltage | | $V_R$ | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| RMS voltage | | $V_{RMS}$ | 14 | 21 | 28 | 35 | 42 | 56 | 70 | V |
| Forward rectified current | | $I_O$ | 2.0 | | | | | | | A |
| Maximum forward voltage @ $I_F$=2.0A | | $V_F$ | 0.50 | | | 0.70 | | 0.85 | | V |
| Max. Forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | | $I_{FSM}$ | 50 | | | | | | | A |
| Max.Reverse current | $V_R$=$V_{RRM}$ $T_J$=25°C | $I_R$ | 0.5 | | | | | | | mA |
| | $V_R$=$V_{RRM}$ $T_J$=100°C | | 10 | | | | | | | |
| Typ. Thermal resistance (Junction to ambient) | | $R_{\theta JA}$ | 85 | | | | | | | °C/W |
| Typ. Diode Junction capacitance (Note 1) | | $C_J$ | 160 | | | | | | | pF |
| Operating temperature | | $T_J$ | -55 to +125 | | | -55 to +150 | | | | °C |
| Storage temperature range | | $T_{STG}$ | -65 to +175 | | | | | | | °C |

Note : 1. F=1MHz and applied 4V DC reverse voltage



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