

## SMD Schottky Barrier Rectifiers

**Package: SOD-123T / Mini SMA  
(Molded Plastic)**

**Reverse Voltage: 20 to 100 Volts**

**Forward Current: 3.0 Amps**

**RoHS Device**

**Halogen Free**

**Lead Free**

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

**Low profile surface mounted application in order to optimize board space**

**Low power loss, high efficiency**

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

**High surge capability**

**Guarding for over voltage protection**

**Ultra high-speed switching**

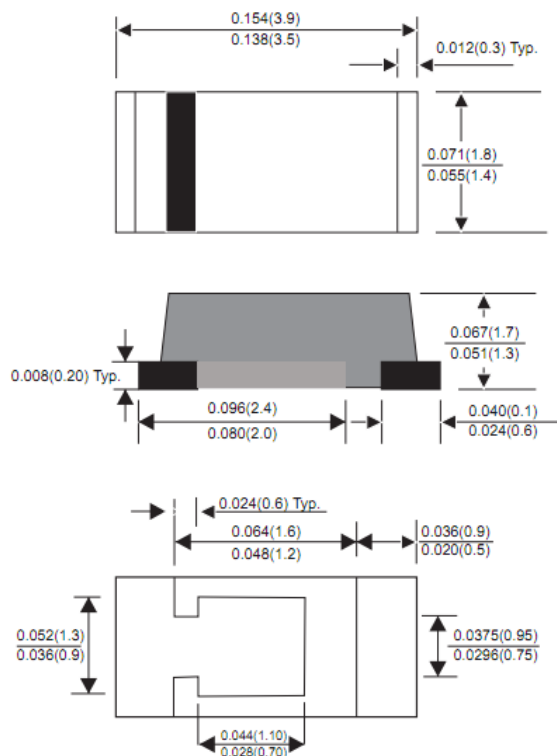
**Silicon epitaxial planar chip, metal silicon junction**

**Lead-free parts meet environmental standards of MIL-STD-19500/22**

Comchip's CDBMH Schottky barrier rectifier series utilizes the new low profile flat chip SOD-123T (Mini SMA) package. The SOD-123T measures: 1.6mm(w) x 3.7mm(l) x 1.5mm(h). The low forward voltage and fast recovery time leads to increased efficiency. With today's market demanding smaller, thinner, and more powerful products, Comchip is striving to exceed market demands with quality products at a conveniently low price. With a forward current of 3 amps, reverse voltage applications range from 20 to 100 volts.



### SOD-123T



Dimensions in inches and (millimeter)

**Terminals: Solderable per MIL-STD-750, method 2026.**

**Polarity: Indicated by cathode band.**

**Weight: 0.018 grams approx.**

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#### Maximum Ratings (at T<sub>A</sub>=25 °C unless otherwise noted)

Parameter		Symbol	CDBMH 320-HF	CDBMH 330-HF	CDBMH 340-HF	CDBMH 350-HF	CDBMH 360-HF	CDBMH 380-HF	CDBMH 3100-HF	Unit
Repetitive peak reverse voltage		V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Continuous reverse voltage		V <sub>R</sub>	20	30	40	50	60	80	100	V
RMS voltage		V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Max. Forward rectified current		I <sub>O</sub>	3.0							A
Maximum forward voltage at I <sub>F</sub> =3.0A		V <sub>F</sub>	0.50			0.70		0.85		V
Max. Forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	80							A
Max.Reverse current	V <sub>R</sub> =V <sub>RRM</sub> T <sub>J</sub> =25°C	I <sub>R</sub>	0.2							mA
	V <sub>R</sub> =V <sub>RRM</sub> T <sub>J</sub> =100°C	I <sub>R</sub>	20							
Typ. Thermal resistance		R <sub>θJC</sub>	30							°C/W
Typ. Diode Junction capacitance (Note 1)		C <sub>J</sub>	250							pF
Operating temperature		T <sub>J</sub>	-55 to +125			-55 to +150				°C
Storage temperature range		T <sub>STG</sub>	-65 to +175							°C

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

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