

Low Profile SMD Schottky Barrier Rectifiers

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

Reverse Voltage: 20 to 150 Volts

Forward Current: 1.0 Amp

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

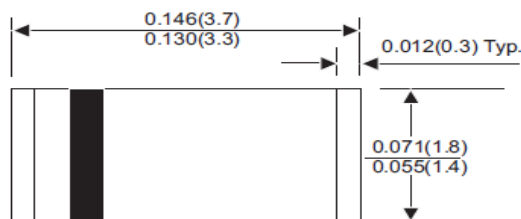
Silicon epitaxial planar chip, metal silicon junction.

Lead-free part meets environmental standards of MIL-STD-19500/22

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 1 amp, reverse voltage applications range from 20 to 150 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 $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	CDBMT 120-HF	CDBMT 130-HF	CDBMT 140-HF	CDBMT 150-HF	CDBMT 160-HF	CDBMT 180-HF	CDBMT 1100-HF	CDBMT 1150-HF	Unit
Repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	V
Continuous reverse voltage	V _R	20	30	40	50	60	80	100	150	V
RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	V
Forward rectified current	I _O	1.0								A
Maximum forward voltage @ I _F =1.0A	V _F	0.50			0.70		0.85		0.92	V
Max. Forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25								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 _{θJA}	98								°C/W
Typ. Diode Junction capacitance (Note 1)	C _J	120								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