

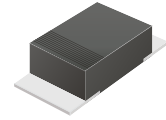
## CDBM220-HF Thru CDBM2100-HF

Reverse Voltage: 20 to 100 Volts

Forward Current: 2.0 Amp

RoHS Device

Halogen free

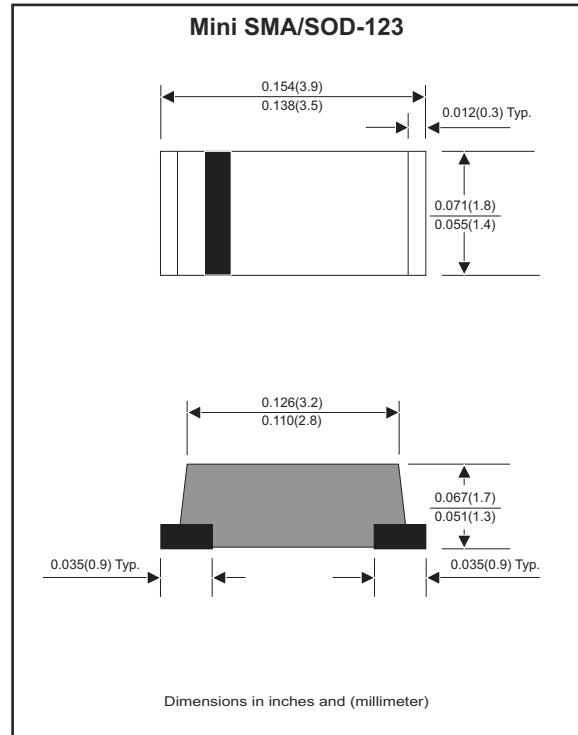


### Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Tiny plastic SMD package.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

### Mechanical data

- Case: Molded plastic, JEDEC MiniSMA/SOD-123.
- Terminals: Solde plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight:0.027 gram(approx.).



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

Parameter	Symbol	CDBM 220-HF	CDBM 230-HF	CDBM 240-HF	CDBM 250-HF	CDBM 260-HF	CDBM 280-HF	CDBM 2100-HF	Unit	
Repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V	
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V	
Continuous reverse voltage	V <sub>R</sub>	20	30	40	50	60	80	100	V	
Maximum forward voltage @I <sub>F</sub> =2.0A	V <sub>F</sub>	0.50			0.70		0.85		V	
Forward rectified current	I <sub>O</sub>	2.0								A
Forward surge current, 8.3ms half sine wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50								A
Reverse current on V <sub>R</sub> =V <sub>RRM</sub> @T <sub>A</sub> =25°C @T <sub>A</sub> =125°C	I <sub>R</sub>	0.5 10								mA
Typ. thermal resistance, junction to ambient air	R <sub>θJA</sub>	85								°C/W
Typ. diode junction capacitance (Note 1)	C <sub>J</sub>	160								pF
Operating junction temperature	T <sub>J</sub>	-55 to +125				-55 to +150				°C
Storage temperature	T <sub>STG</sub>	-65 to +175								°C

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

## Rating and Characteristic Curves (CDBM220-HF Thru CDBM2100-HF)

Fig.1 - Typical Forward Current Derating Curve

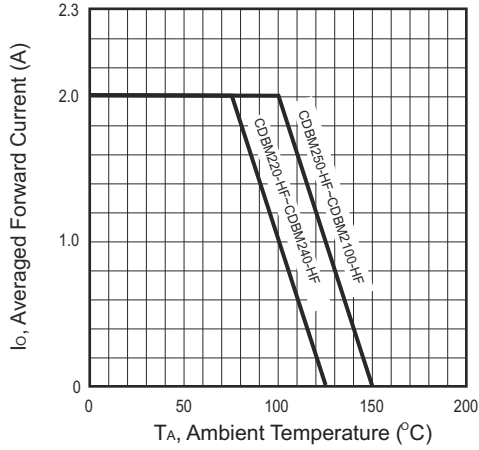


Fig.2 - Typical Forward Characteristics

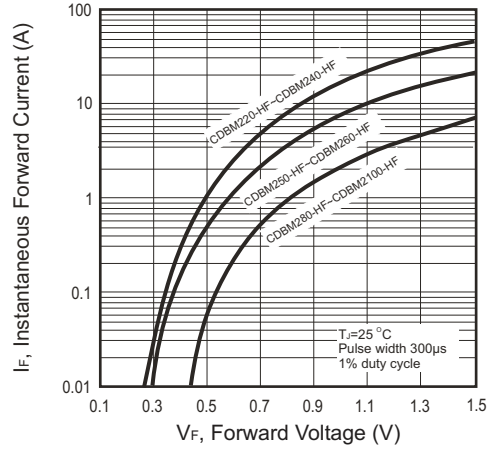


Fig.3 - Maximum Non-repetitive Peak Forward Surge Current

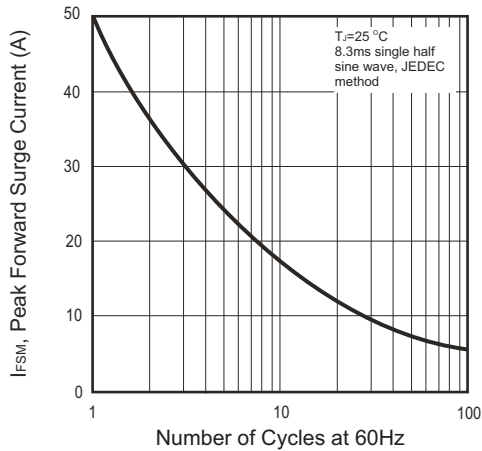


Fig.4 - Typical Junction Capacitance

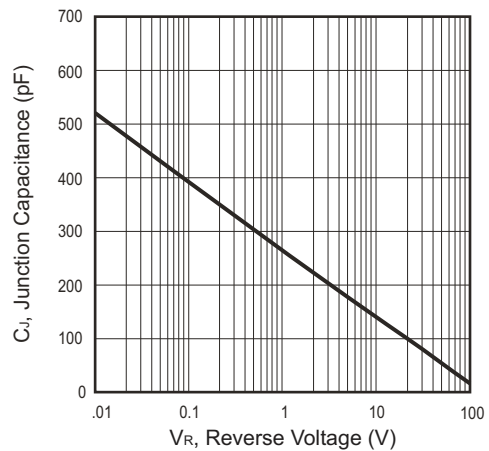


Fig.5 - Typical Reverse Characteristics

