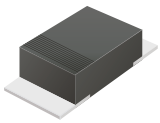
CDBM220-HF Thru CDBM2100-HF

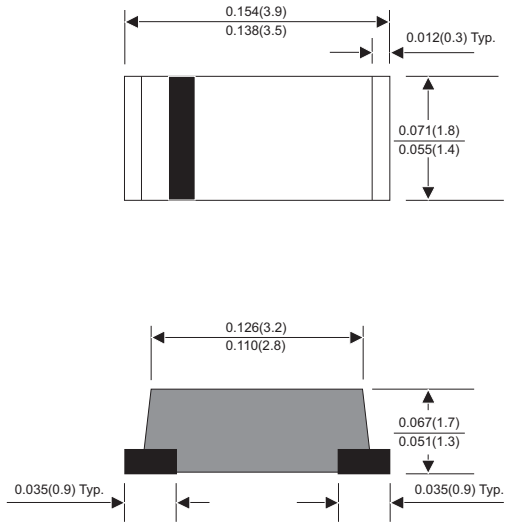
Reverse Voltage: 20 to 100 Volts
Forward Current: 2.0 Amp
RoHS Device
Halogen free



Features

-Batch process design, excellent powe 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 dorp.
-High surge capability.
-Guardring for overvoltage protection.
-Ultra high-speed switching.
-Silicon epitaxial planarchip, metal silicon junction.
-Lead-free parts meet environmental standards of MIL-STD-19500 /228

Mini SMA/SOD-123



Dimensions in inches and (millimeter)

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 T_A=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_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Continuous reverse voltage	V_R	20	30	40	50	60	80	100	V
Maximum forward voltage @I_F=2.0A	V_F	0.50			0.70		0.85		V
Forward rectified current	I_O	2.0							A
Forward surge current, 8.3ms half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	50							A
Reverse current on V_R=V_{RRM} @T_A=25°C @T_A=125°C	I_R	0.5 10							mA
Typ. thermal resistance, junction to ambient air	$R_{\theta JA}$	85							°C/W
Typ. diode junction capacitance (Note 1)	C_J	160							pF
Operating junction temperature	T_J	-55 to +125			-55 to +150				°C
Storage temperature	T_{STG}	-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

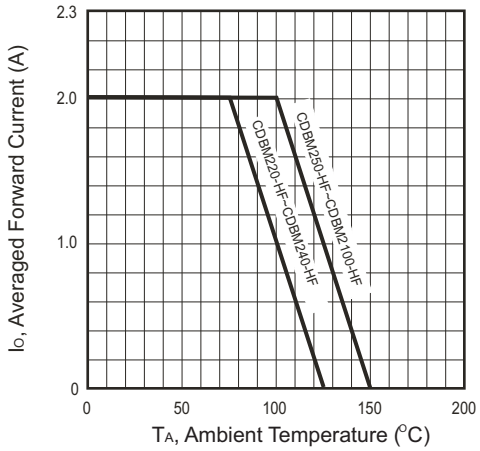


Fig.2 - Typical Forward Characteristics

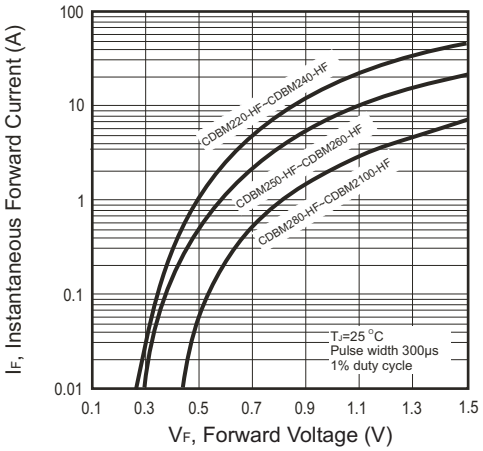


Fig.3 - Maximum Non-repetitive Peak Forward Surge Current

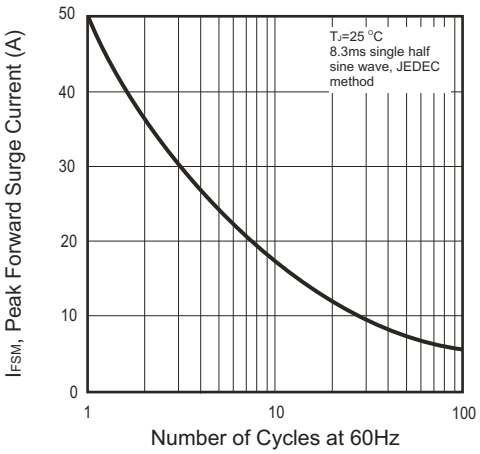


Fig.4 - Typical Junction Capacitance

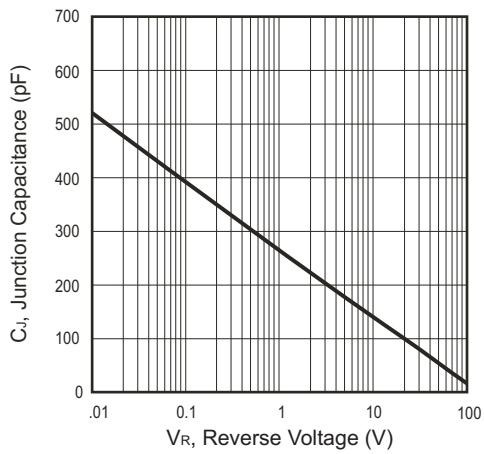


Fig.5 - Typical Reverse Characteristics