

SMD Schottky Barrier Rectifiers

COACHIP
SMD Diodes Specialist

CDBM120-G Thru CDBM1100-G

Reverse Voltage: 20 - 100 Volts

Forward Current: 1.0 Amp

RoHS Device

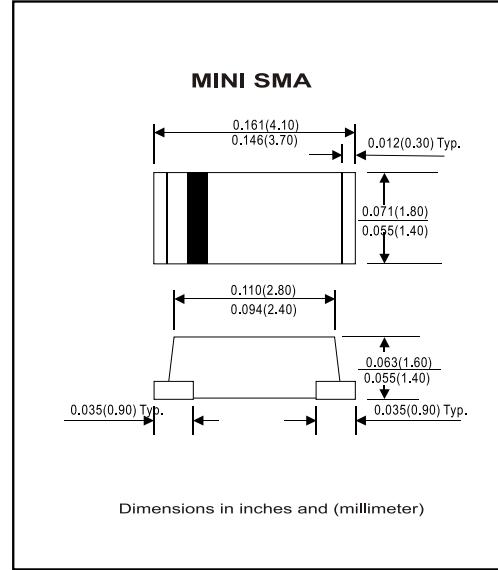


Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Exceeds environmental standard MIL-S-19500/228
- Low leakage current

Mechanical data

- Case: Mini SMA/SOD-123 molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.04 gram



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBM120-G	CDBM140-G	CDBM160-G	CDBM180-G	CDBM1100-G	Unit
Max. Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	V
Max. DC Blocking Voltage	V _{DC}	20	40	60	80	100	V
Max. RMS Voltage	V _{RMS}	14	28	42	56	70	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}			30			A
Max. Average Forward Current	I _o			1.0			A
Max. Instantaneous Forward Current at 1.0 A	V _F		0.50	0.70	0.85		V
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C	I _R			0.5			mA
Ta=100°C				10			
Max. Thermal Resistance (Note 1)	R _{θ JA}		98				°C/W
	R _{θ JL}		20				
MAX. Operating Junction Temperature	T _j		125		150		°C
Storage Temperature	T _{STG}		-55 to +150				°C

Note 1: Thermal resistance from junction to ambient and junction to lead mounted on PCB with 0.2 x 0.2 inch² copper pad areas

Rev. A

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Rating and Characteristic Curves (CDBM120-G Thru CDBM1100-G)

Fig. 1 - Reverse Characteristics

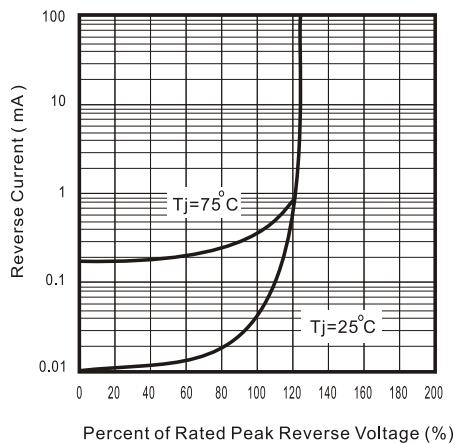


Fig.2 - Forward Characteristics

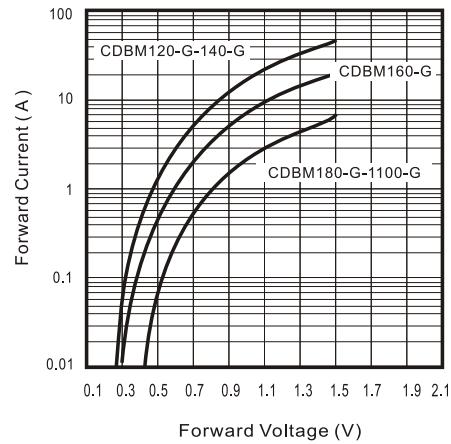


Fig. 3 - Junction Capacitance

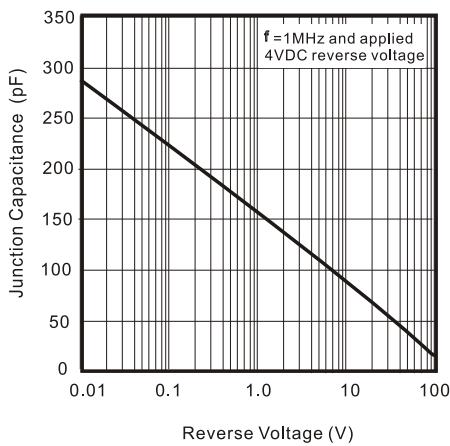


Fig. 4 - Current Derating Curve

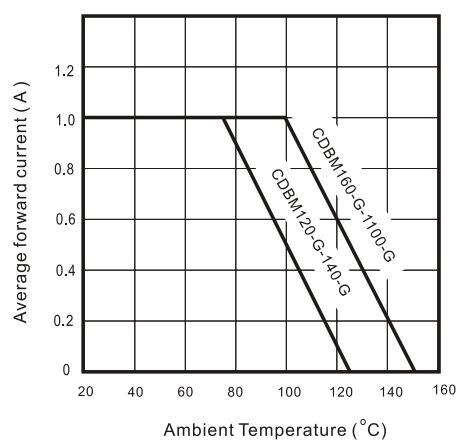
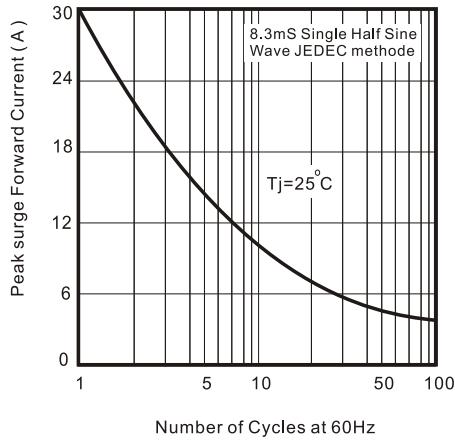


Fig. 5 - Non repetitive Forward Surge Current



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