Low VF SMD Schottky Barrier Rectifier

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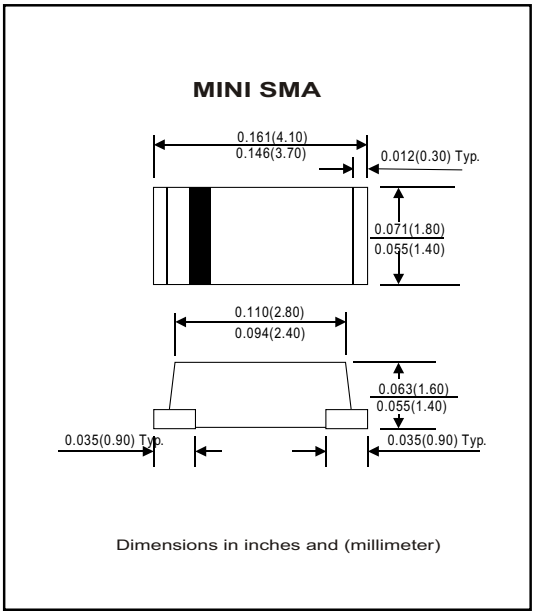
CDBM120L Thru CDBM140L

Reverse Voltage: 20 - 40 Volts
Forward Current: 1.0 Amp

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 molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight:0.04 gram

Maximum Ratings and Electrical Characterics

Parameter	Symbol	CDBM120L	CDBM140L	Unit
Max. Repetitive Peak Reverse Voltage	V_{RRM}	20	40	V
Max. DC Blocking Voltage	V_{DC}	20	40	V
Max. RMS Voltage	V_{RMS}	14	28	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	0.38	0.40	V
Max. DC Reverse Current at Rated DC Blocking Voltage Ta=25°C	I_R	0.5		mA
Ta=100°C		10	5	
Max. Thermal Resistance (Note 1)	$R_{\theta JA}$	88		°C/W
	$R_{\theta JL}$	20		
Operating Junction Temperature	T_j	-55 to +125		°C
Storage Temperature	T_{STG}	-55 to +150		°C

Note 1: Thermal resistance from junction to ambient and junction to to lead P.C.B. Mounted on 0.2 x 0.2 copper pad areas

Rating and Characteristic Curves (CDBM120L Thru CDBM140:L)

Fig. 1 - Reverse Characteristics

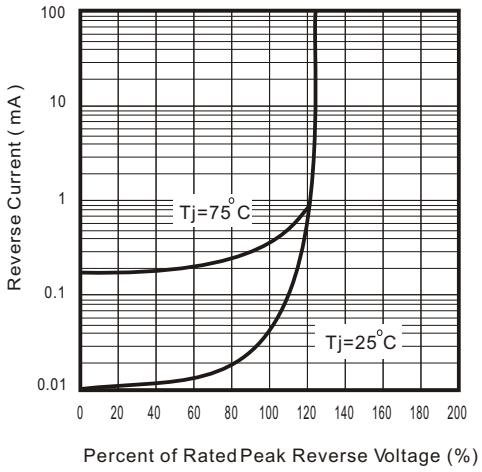


Fig.2 - Forward Characteristics

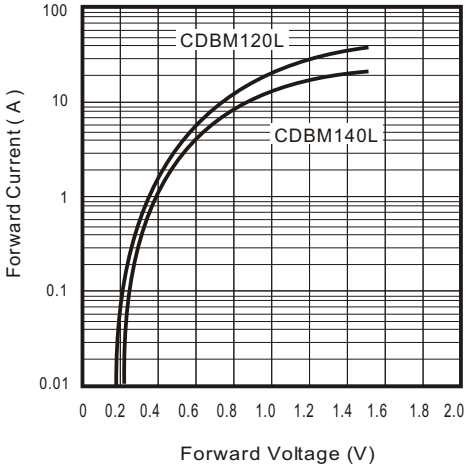


Fig. 3 - Junction Capacitance

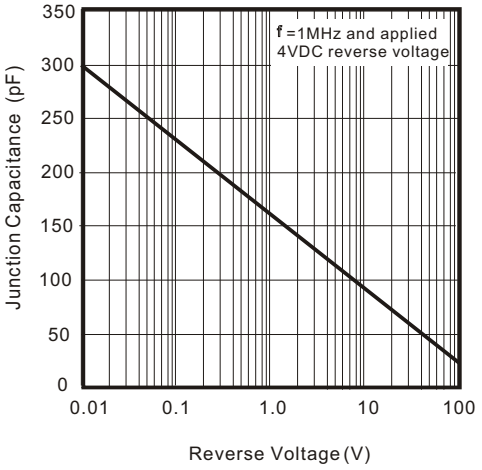


Fig. 4 - Current Derating Curve

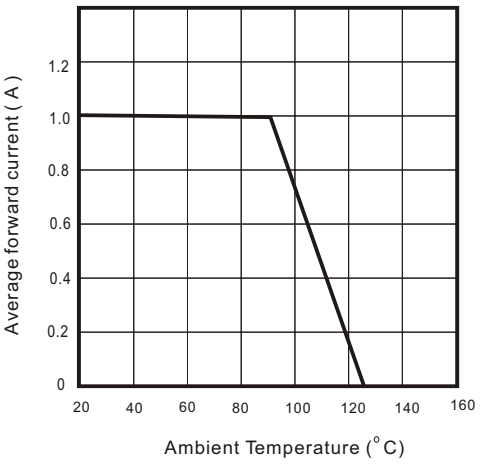


Fig. 5 - Non repetitive Forward Surge Current