

Low VF SMD Schottky Barrier Rectifiers

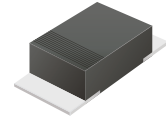


CDBM120L-G Thru. CDBM140L-G

Reverse Voltage: 20 to 40 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.

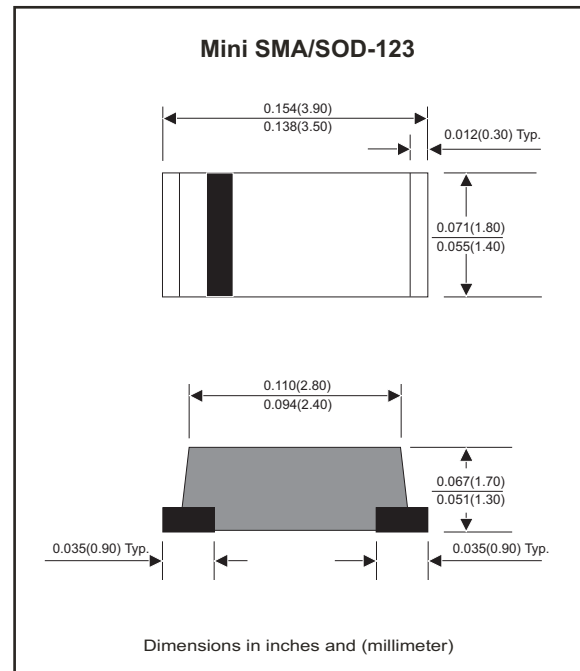
Mechanical data

Case: Mini SMA/SOD-123, molded plastic.

Terminals: solderable per MIL-STD-750, method 2026.

Polarity: Color band denotes cathode end.

Weight: 0.027 gram (approx.).



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBM120L-G	CDBM140L-G	Units
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 voltage at 1.0A	V_F	0.38	0.40	V
Max. DC reverse current at $T_A=25^{\circ}C$ rated DC blocking voltage $T_A=100^{\circ}C$	I_R	1.0 10		mA
Max. thermal resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	42 20		$^{\circ}C/W$
Max. operating junction temperature	T_J	125		$^{\circ}C$
Storage temperature	T_{STG}	-55 to +150		$^{\circ}C$

Notes: 1. Thermal resistance from junction to ambient and junction to lead, P.C.B. mounted on 0.2×0.2 inch copper pad area.

RATING AND CHARACTERISTIC CURVES (CDBM120L-G thru CDBM140L-G)

Fig.1 Reverse Characteristics

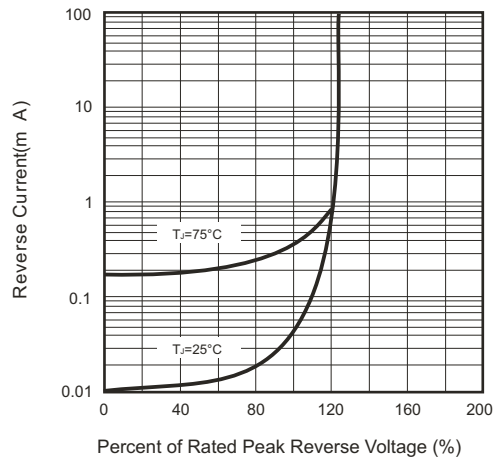


Fig.2 Forward Characteristics

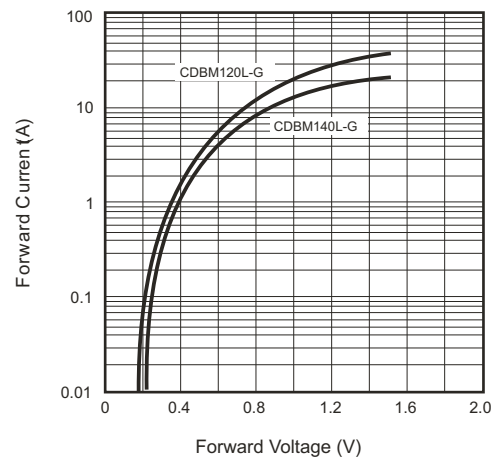


Fig.3 Junction Capacitance

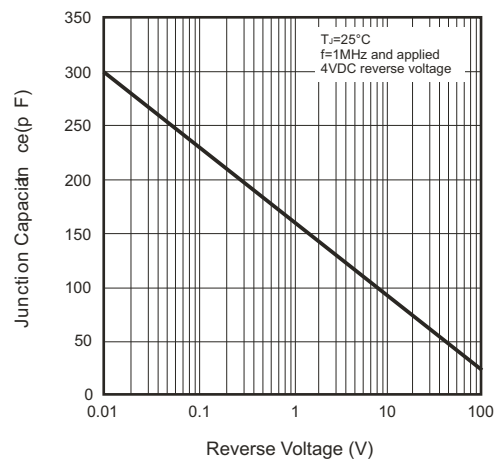


Fig.4 Current Derating Curve

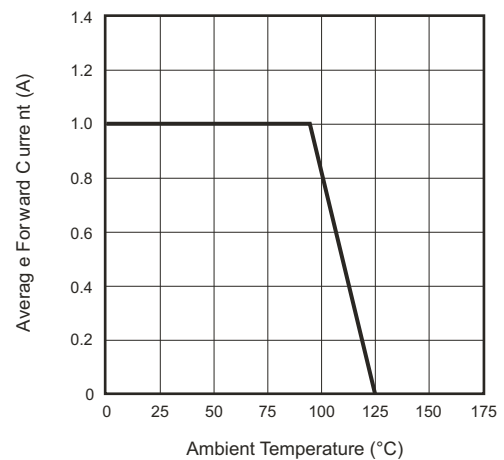
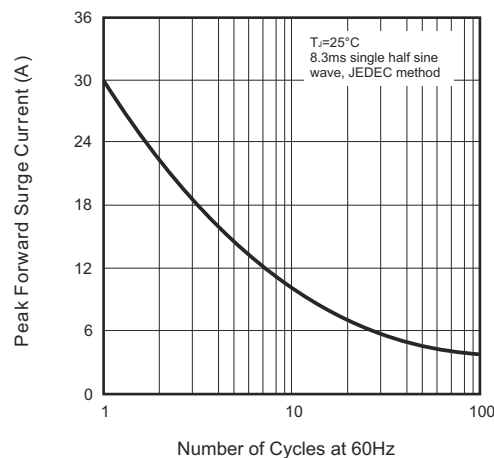
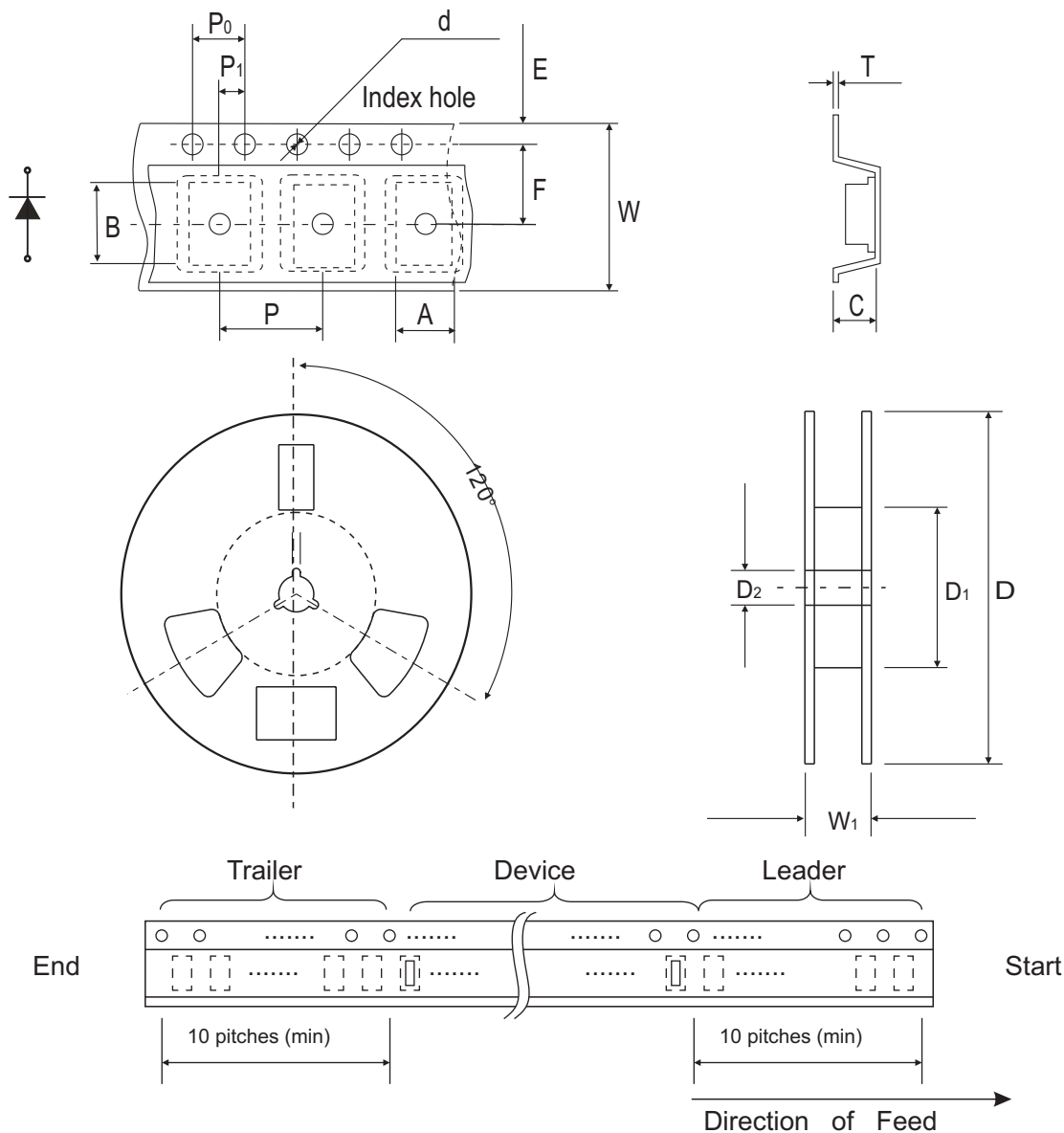


Fig.5 Non-repetitive Forward Surge Current



Reel Taping Specification



	SYMBOL	A	B	C	d	D	D1	D2
Mini-SMA/SOD-123	(mm)	1.90 ± 0.10	3.90 ± 0.10	1.68 ± 0.10	1.50 ± 0.10	178 ± 2.00	62.0 MIN.	13.0 ± 0.50
	(inch)	0.075 ± 0.04	0.153 ± 0.04	0.066 ± 0.04	0.059 ± 0.004	7.00 ± 0.079	2.440 MIN.	0.512 ± 0.020

	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
Mini-SMA/SOD-123	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 ± 0.30	14.4 ± 0.10
	(inch)	0.689 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 ± 0.011	0.567 ± 0.004

Marking Code

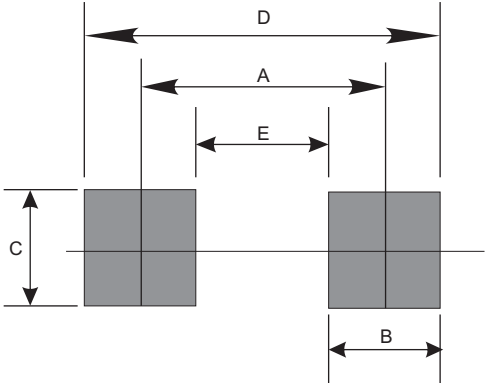
Part Number	Marking Code
CDBM120L-G	L2
CDBM140L-G	L4



xx = Product type marking code

Suggested PAD Layout

SIZE	Mini-SMA/SOD-123	
	(mm)	(inch)
A	3.30	0.130
B	1.40	0.055
C	1.90	0.075
D	4.70	0.185
E	1.90	0.075



Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
Mini-SMA/SOD-123	2500	7