Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

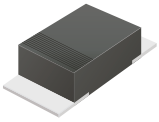
Comchip Technology
CDBM120L-HF

For any questions, you can email us directly:
sales@integrated-circuit.com

Low V_F SMD Schottky Barrier Rectifiers

CDBM120L-HF Thru. CDBM140L-HF

Reverse Voltage: 20 to 40 Volts
Forward Current: 1.0 Amp
RoHS Device
Halogen free



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

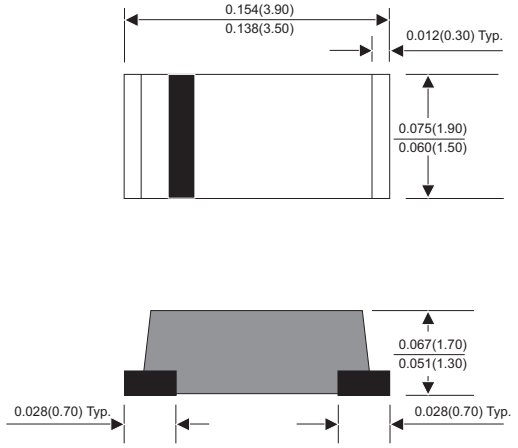
-Case: Mini SMA/SOD-123, molded plastic.

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

-Polarity: Color band denotes cathode end.

-Approx. weight: 0.027 grams

Mini SMA



Dimensions in inches and (millimeter)

Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBM120L-HF	CDBM130L-HF	CDBM140L-HF	Units
Max. Repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Max. DC blocking voltage	V_R	20	30	40	V
Max. RMS voltage	V_{RMS}	14	21	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 I_F=1.0A	V_F	0.38	0.40	0.40	V
Max. DC reverse current at T_A=25°C	I_R	1.0			mA
Max. thermal resistance (Note 1)	$R_{\theta JA}$	42			°C/W
Typ. Diode Junction capacitance (F=1MHz and applied 4V DC reverse voltage)	C_J	130			°C
Max. operating junction temperature	T_J	-55 to +100			°C
Storage temperature	T_{STG}	-65 to +175			°C

Notes: 1. Thermal resistance from junction to ambient and junction to lead, P.C.B. mounted on 0.2×0.2 inch^2 copper pad area.

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

Fig.1 - Typical Forward Characteristics

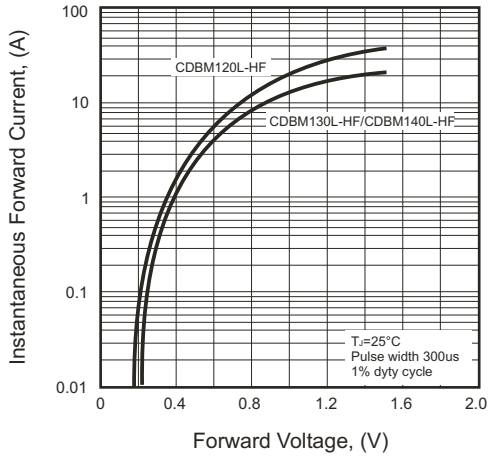


Fig.2 - Typical Forward Current Derating Curve

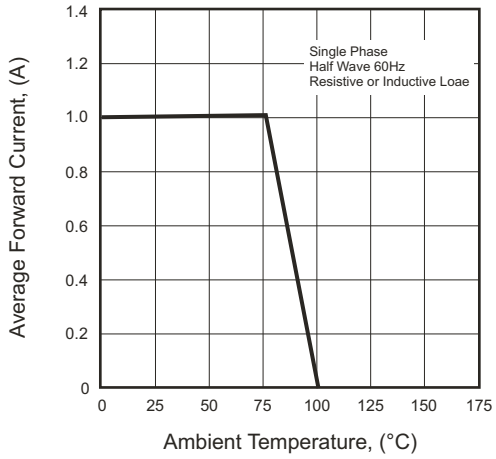


Fig.3 - Typical Reverse Characteristics

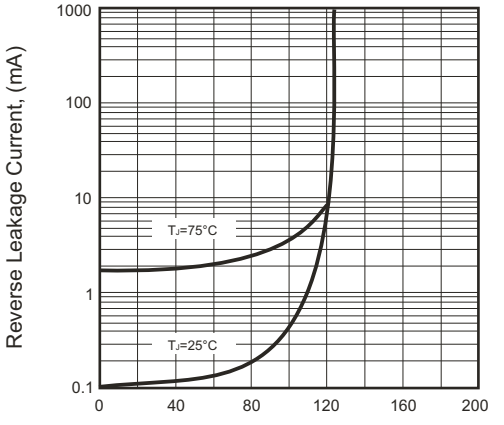


Fig.4 - Max. Non-repetitive Forward Surge Current

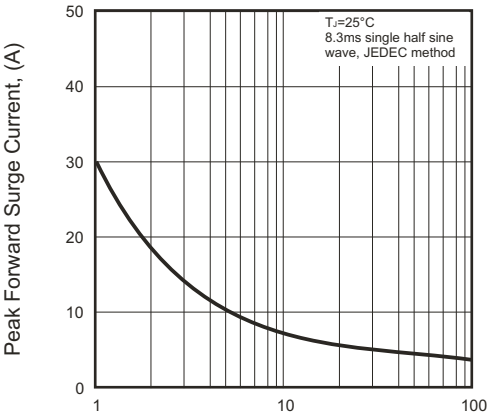
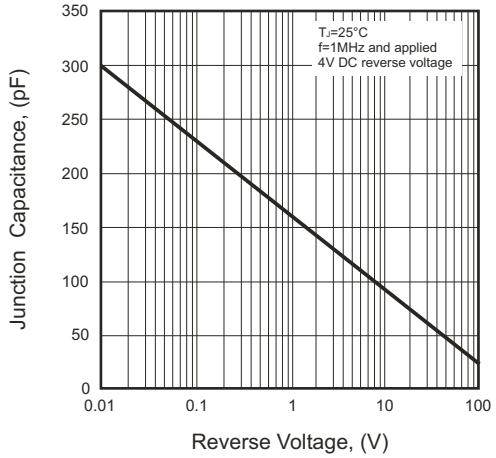


Fig.5 - Typical Junction Capacitance



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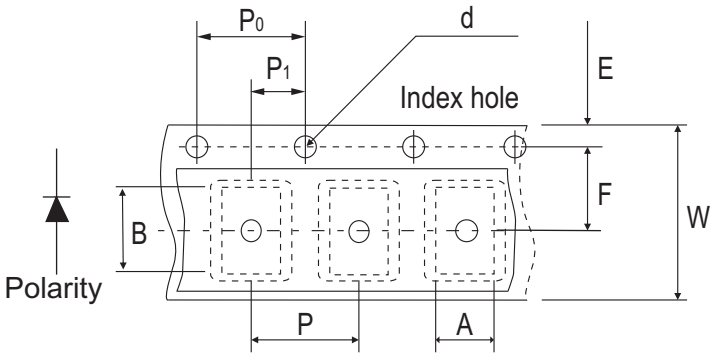
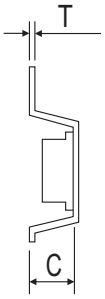
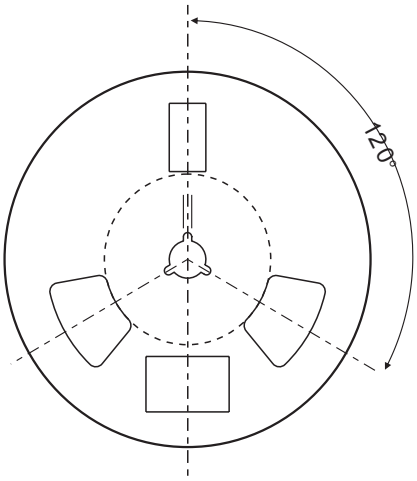
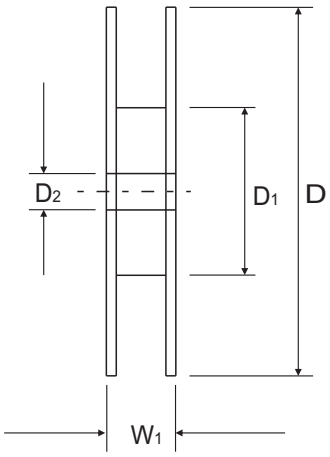
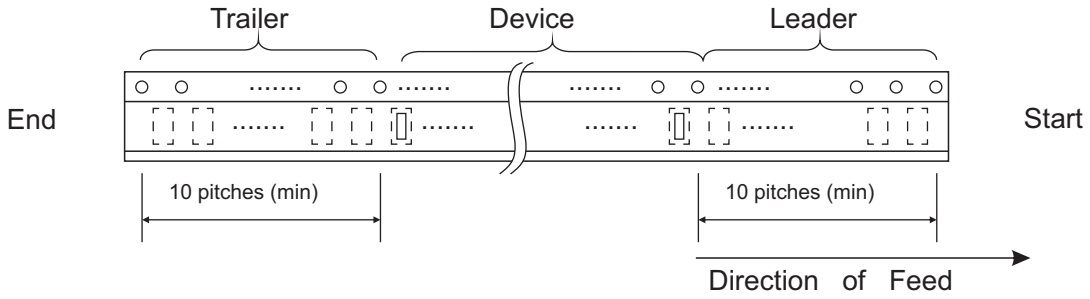
Reel Taping Specification











	SYMBOL	A	B	C	d	D	D_1	D_2
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	0.154 ± 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	T	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	0.23 ± 0.10	8.00 ± 0.30	11.40 ± 1.0
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.004	0.315 ± 0.012	0.449 ± 0.004

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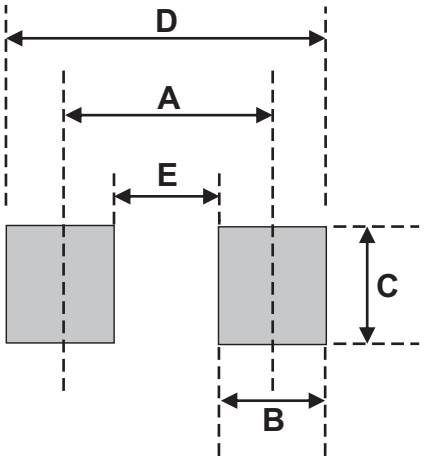
Marking Code

Part Number	Marking Code
CDBM120L-HF	L2
CDBM130L-HF	L3
CDBM140L-HF	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 Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
Mini-SMA/SOD-123	2,500	7