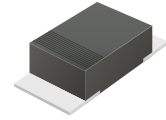


## CDBM120L-G Thru. CDBM140L-G

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.

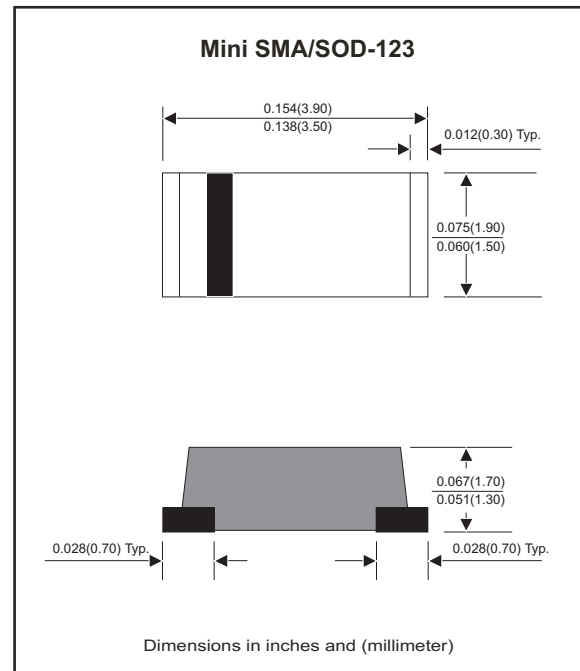
### Mechanical data

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

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

Polarity: Color band denotes cathode end.

Weight: 0.018 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. Forward voltage at $I_F=1.0A$	$V_F$	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)	$R_{\theta JA}$	42		$^{\circ}C/W$
Operating junction temperature	$T_J$	-55 to +100		$^{\circ}C$
Storage temperature	$T_{STG}$	-55 to +175		$^{\circ}C$

Notes: 1. Thermal resistance from junction to ambient and junction to lead, P.C.B. mounted on 0.2x0.2 inch copper pad area.

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

Fig.1 Typical Forward Characteristics

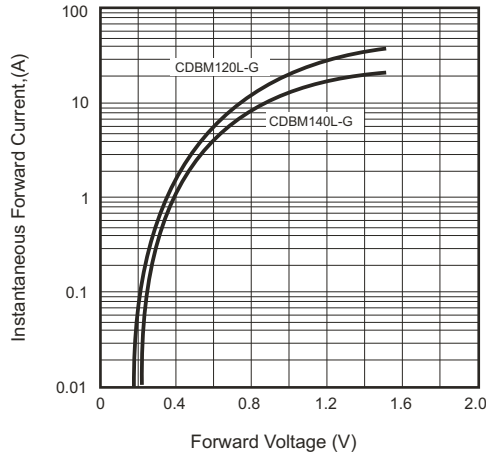


Fig.2 Typical Forward Current Derating Curve

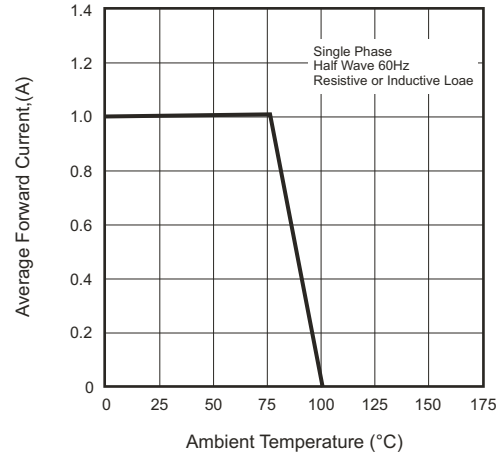


Fig.3 Typical Reverse Characteristics

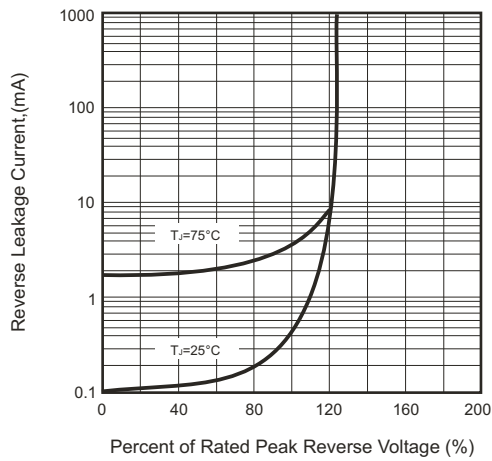


Fig.4 Max. Non-repetitive Forward Surge Current

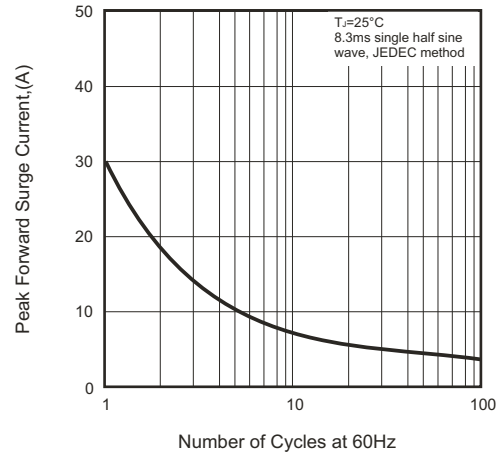
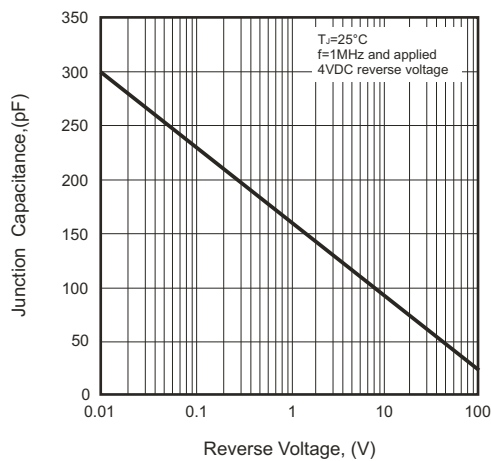
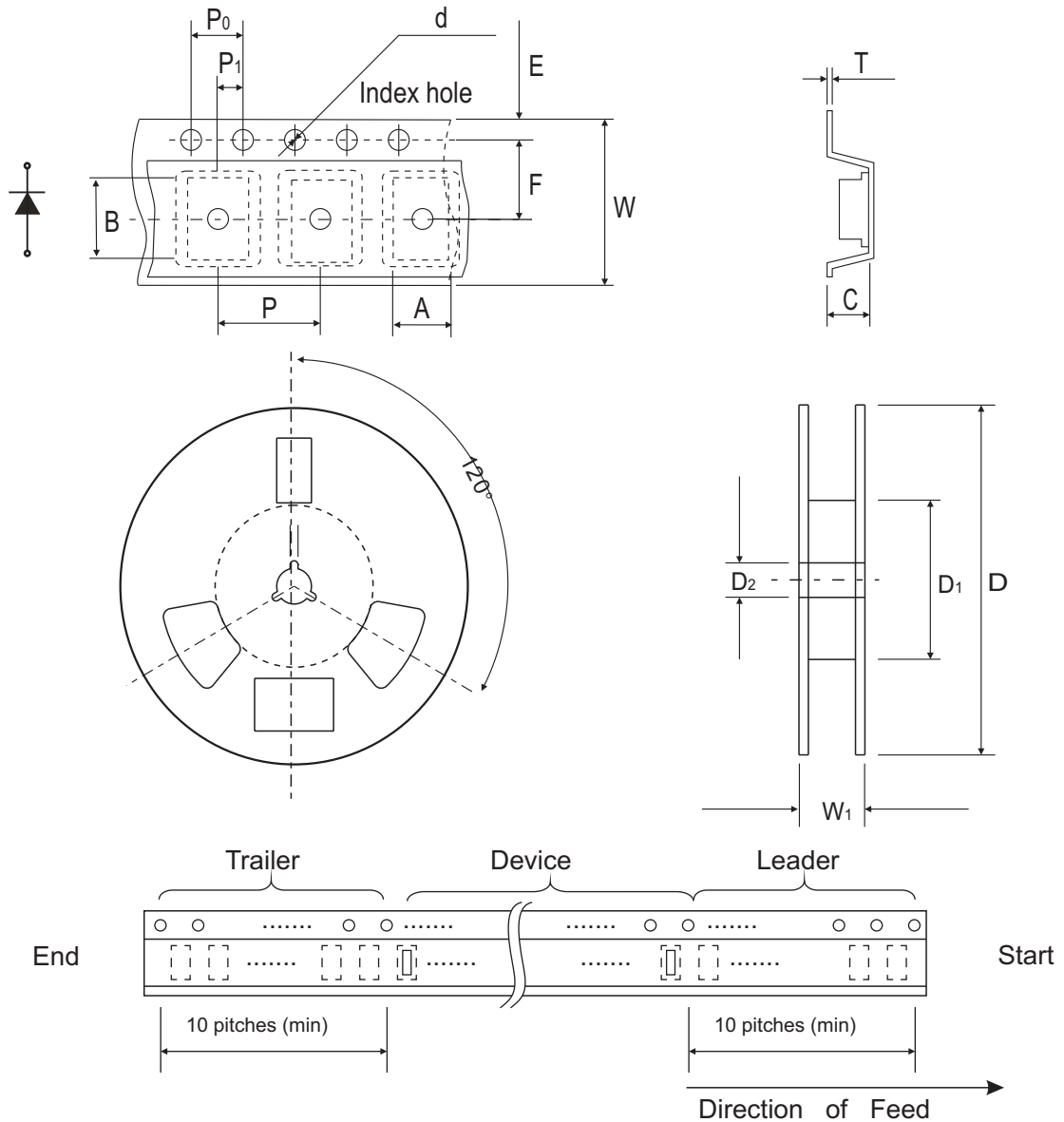


Fig.5 Typical Junction Capacitance



## Reel Taping Specification



Mini-SMA/SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	$1.90 \pm 0.10$	$3.90 \pm 0.10$	$1.68 \pm 0.10$	$1.50 \pm 0.10$	$178 \pm 2.00$	62.0 MIN.	$13.0 \pm 0.50$
	(inch)	$0.075 \pm 0.04$	$0.154 \pm 0.04$	$0.066 \pm 0.04$	$0.059 \pm 0.004$	$7.00 \pm 0.079$	2.440 MIN.	$0.512 \pm 0.020$

Mini-SMA/SOD-123	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	$1.75 \pm 0.10$	$3.50 \pm 0.10$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$0.23 \pm 0.10$	$8.00 \pm 0.30$	$11.40 \pm 1.0$
	(inch)	$0.069 \pm 0.004$	$0.138 \pm 0.004$	$0.157 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.009 \pm 0.004$	$0.315 \pm 0.012$	$0.449 \pm 0.004$

## Marking Code

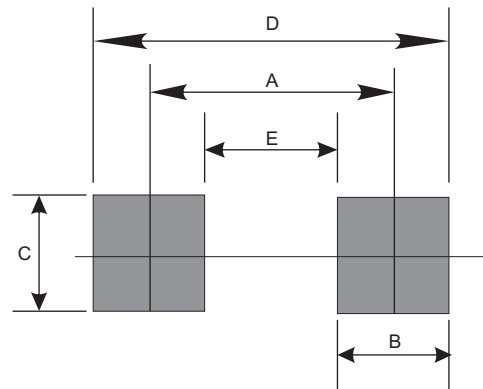
Part Number	Marking Code
CDBM120L-G	L2
CDBM140L-G	L4



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