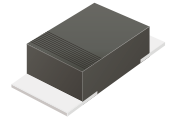


CDBMT240L-G

Reverse Voltage: 40 Volts

Forward Current: 2.0 Amp

RoHS Device

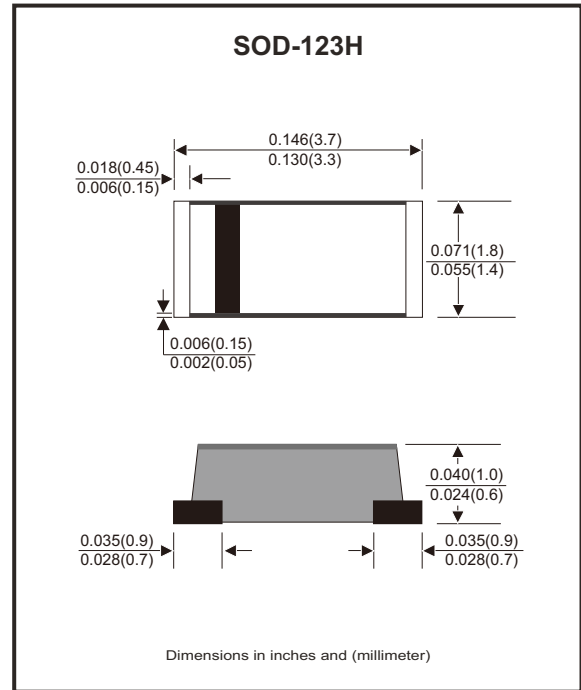


Features

- Excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guarding for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free part meets environmental standards of MIL-STD-19500/228

Mechanical data

- Case: Mini SMA/SOD-123H , molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.011 grams approx.



Circuit Diagram



Maximum Ratings and Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	CDBMT240L-G	Units
Max. Repetitive peak reverse voltage	V_{RRM}	40	V
Continuous reverse voltage	V_R	40	V
Max. RMS voltage	V_{RMS}	28	V
Max. Forward surge current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	50	A
Max. Forward rectified current (Fig.2)	I_o	2.0	A
Max. Forward voltage @ $I_F=2.0\text{A}$	V_F	0.40	V
Max. Reverse current @ $T_A=25^\circ\text{C}$	I_R	1.0	mA
Typ. Thermal resistance junction to ambient	$R_{\theta JA}$	70	$^\circ\text{C/W}$
Typ. Diode junction capacitance $f=1\text{MHz}$ and applied 4V DC reverse voltage	C_J	160	pF
Storage temperature range	T_{STG}	-65 to +175	$^\circ\text{C}$
Operating temperature range	T_J	-55 to +100	$^\circ\text{C}$

Company reserves the right to improve product design , functions and reliability without notice.

REV:C

RATING AND CHARACTERISTIC CURVES (CDBMT240L-G)

Fig.1 - Typical Forward Characteristics

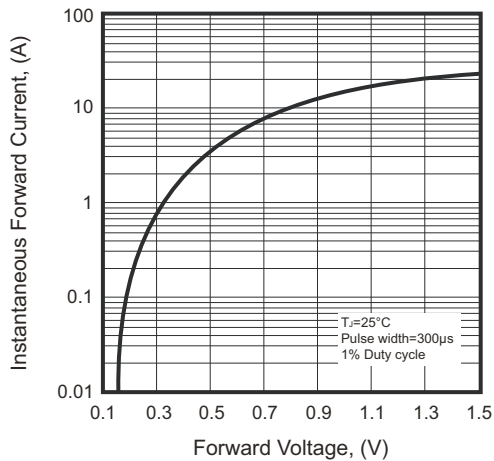


Fig.2 - Typical Forward Current Derating Curve

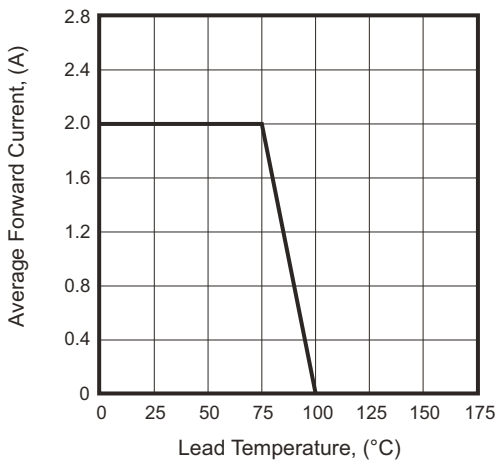


Fig.3 - Typical Reverse Characteristics

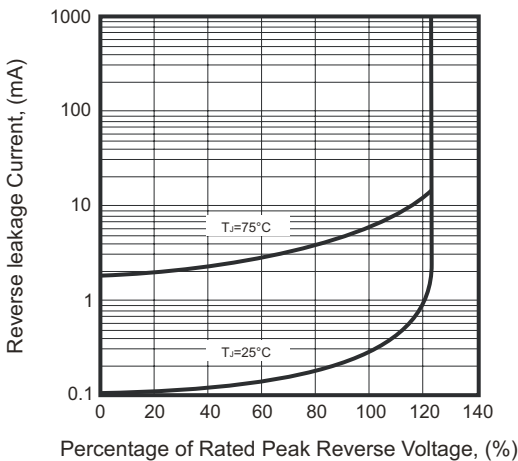


Fig.4 - Maximum Non-repetitive Forward Surge Current

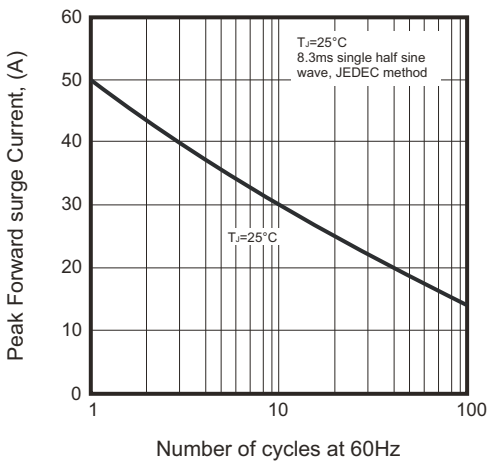
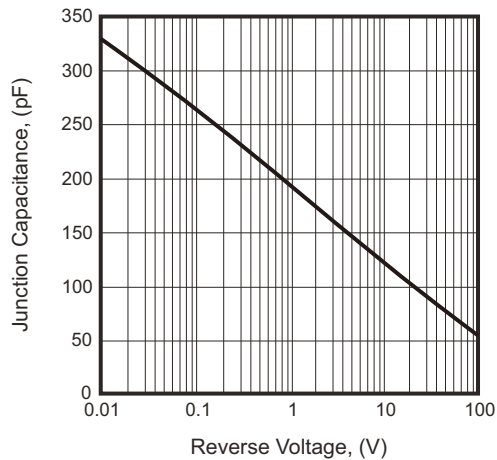
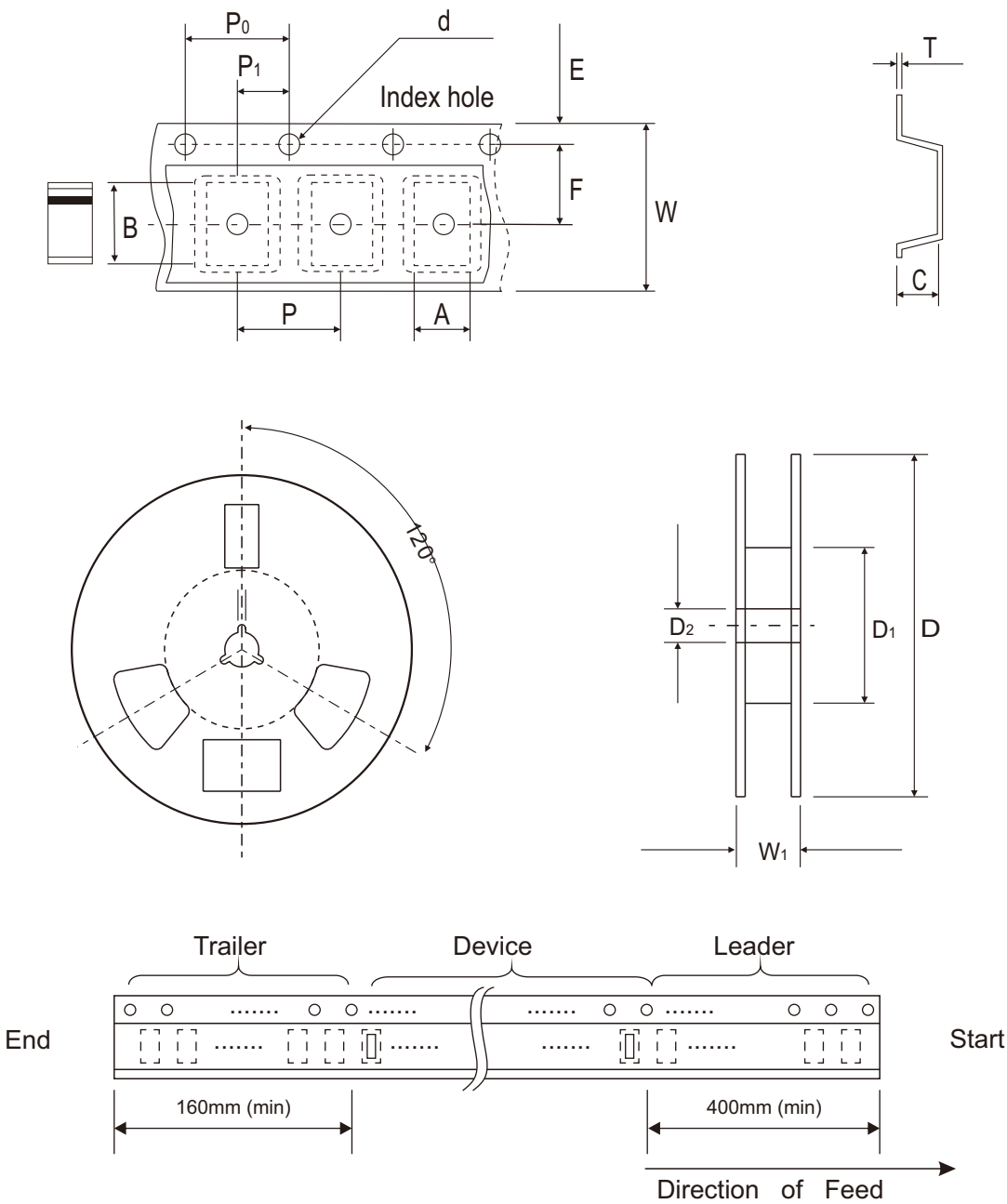


Fig.5 - Typical Junction Capacitance



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Reel Taping Specification



SOD-123H	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.00 ± 0.10	3.85 ± 0.10	1.10 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	62.00 (min)	13.00 ± 0.50
	(inch)	0.079 ± 0.004	0.152 ± 0.004	0.043 ± 0.004	0.059 ± 0.004	7.007 ± 0.079	2.441 (min)	0.512 ± 0.020

SOD-123H	SYMBOL	E	F	P	P0	P1	T	W	W1
	(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 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.04	0.315 ± 0.012	0.449 ± 0.039

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Marking Code

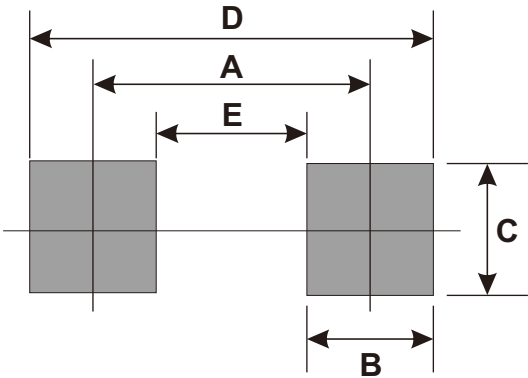
Part Number	Marking Code
CDBMT240L-G	L24



XXX= Product type marking code

Suggested PAD Layout

SIZE	SOD-123H	
	(mm)	(inch)
A	3.00	0.118
B	1.30	0.051
C	1.80	0.071
D	4.30	0.169
E	1.70	0.067



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-123H	3,000	7