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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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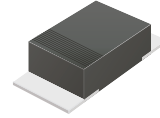
## CDBMT240-HF Thru. CDBMT2200-HF

Reverse Voltage: 40 to 200 Volts

Forward Current: 2.0 Amp

RoHS Device

Halogen Free

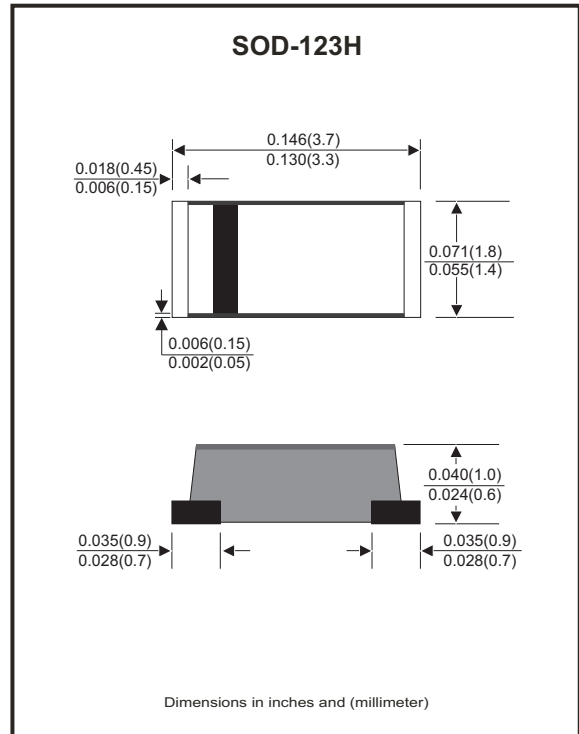


### Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Tiny plastic SMD package.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

### Mechanical data

- Epoxy: UL94V0 rated flame retardant.
- Case: Molded plastic, SOD-123H/MINI SMA
- Terminals: Solderable per MIL-STD-750, Method 2026.
- Polarity: Indicated by cathode band.
- Mounting Position: Any
- Weight: 0.011 grams approx.



### Maximum Ratings and Electrical Characteristics (at T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	CDBMT 240-HF	CDBMT 260-HF	CDBMT 2100-HF	CDBMT 2150-HF	CDBMT 2200-HF	Units
Repetitive peak reverse voltage	V <sub>RRM</sub>	40	60	100	150	200	V
RMS voltage	V <sub>RMS</sub>	28	42	70	105	140	V
Continuous reverse voltage	V <sub>R</sub>	40	60	100	150	200	V
Max. forward voltage @I <sub>F</sub> =2.0A	V <sub>F</sub>	0.50	0.70	0.85	0.90	0.92	V
Operating Temperature	T <sub>J</sub>	-55 to +125	-55 to +150				°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Units
Forward rectified current	see Fig.1	I <sub>O</sub>			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I <sub>FSM</sub>			50	A
Reverse Current	V <sub>R</sub> =V <sub>RRM</sub> T <sub>J</sub> =25°C	I <sub>R</sub>			0.5	mA
	V <sub>R</sub> =V <sub>RRM</sub> T <sub>J</sub> =100°C	I <sub>R</sub>			10	mA
Thermal resistance	Junction to ambient	R <sub>θJA</sub>		85		°C/W
Diode Junction capacitance	f=1MHz and applied 4V DC reverse Voltage	C <sub>J</sub>		160		pF
Storage temperature		T <sub>STG</sub>	-65		+175	°C

Note 1: f=1MHz and applied 4V DC reverse voltage.

## Rating and Characteristic Curves (CDBMT240-HF Thru. CDBMT2200-HF)

Fig.1 - Typical forward current derating curve

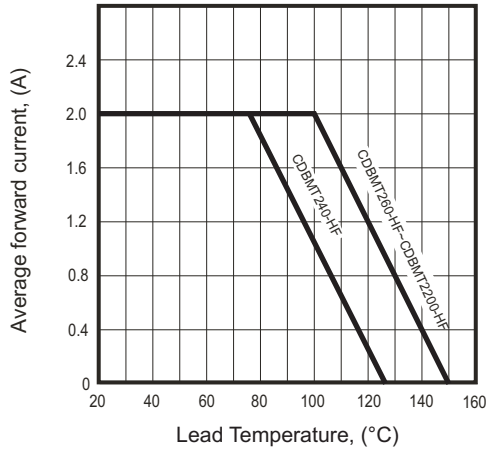


Fig.2 - Typical forward characteristics

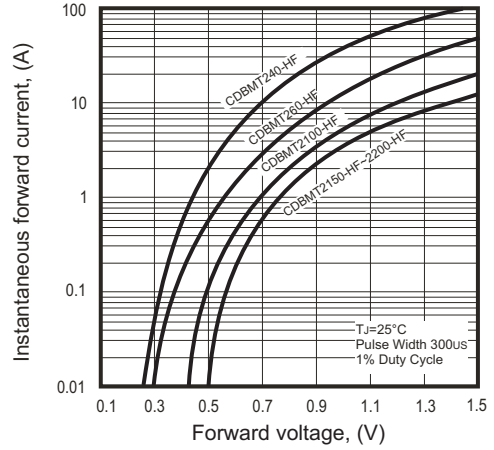


Fig.3 - Maximum Non-repetitive Forward Surge Current

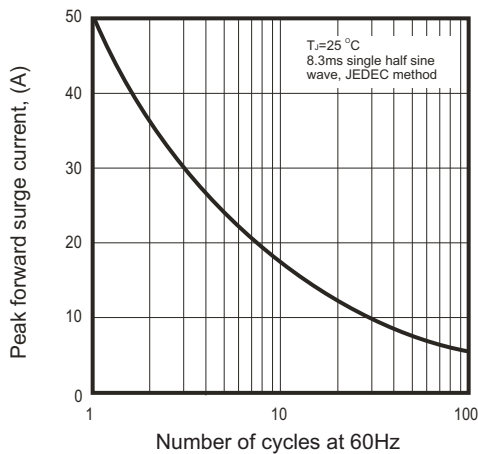


Fig.4 - Typical Junction Capacitance

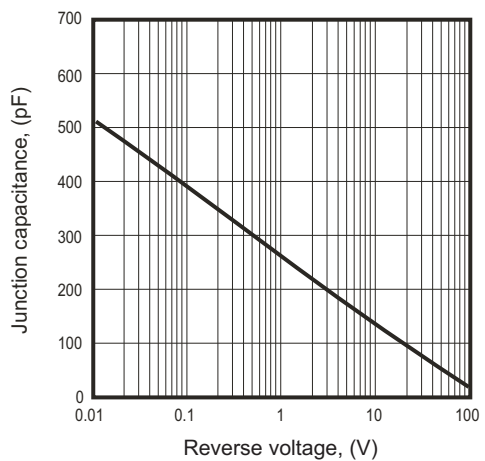
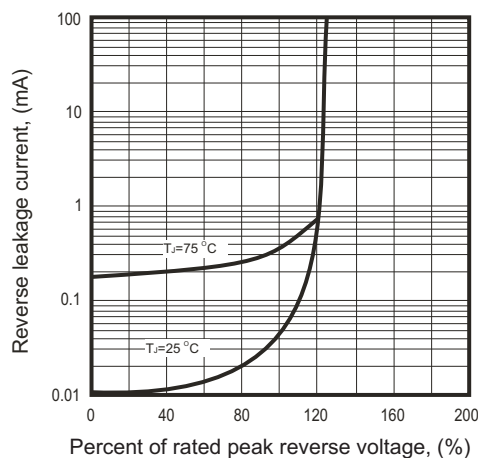
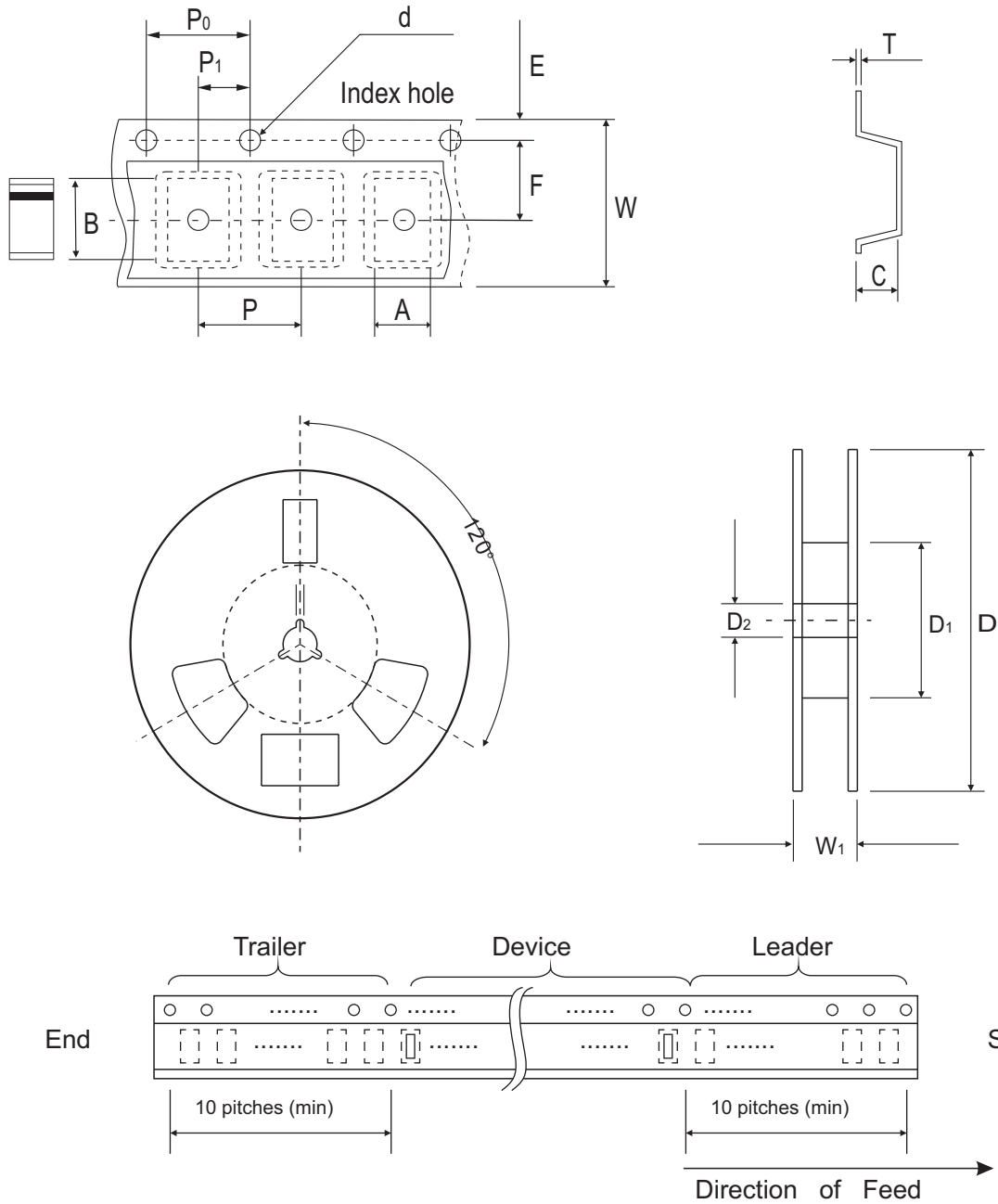


Fig.5 - Typical reverse characteristics



## 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

## Pinning information

Pin	Simplified outline	Symbol
PIN 1 Cathode PIN 2 Anode		

## Marking Code

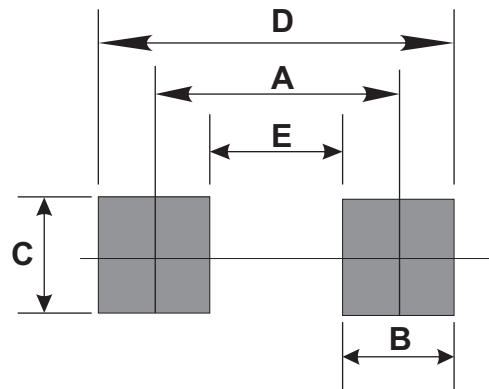
Part Number	Marking Code
CDBMT240-HF	24
CDBMT260-HF	26
CDBMT2100-HF	20
CDBMT2150-HF	215
CDBMT2200-HF	220



xx / 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