

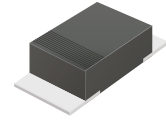
CDBMHT340-HF Thru. CDBMHT3100-HF

Reverse Voltage: 40 to 100 Volts

Forward Current: 3.0 Amp

RoHS Device

Halogen Free

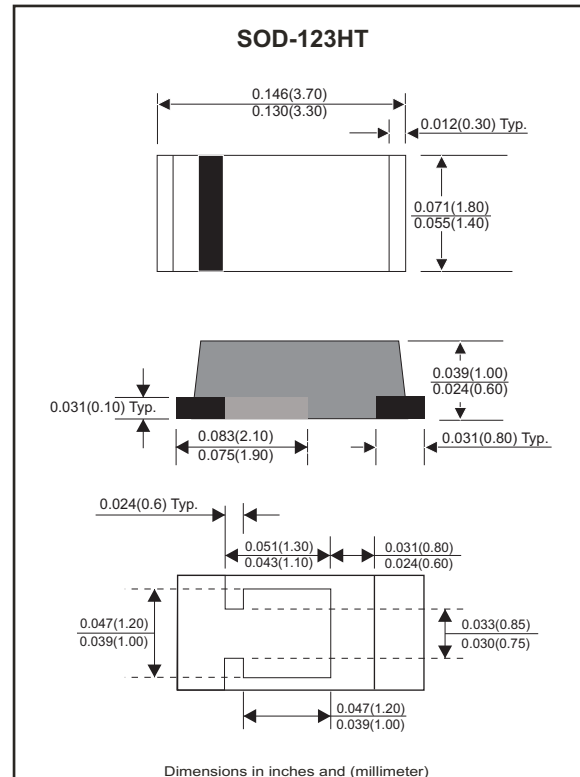


Features

- Excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile package is 40% thinner than standards SOD-123.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guard ring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Heat sink bottom.
- Lead-free parts meet environmental standards of MIL-STD-19500/228

Mechanical data

- Epoxy : UL94-V0 rated flame retardant.
- Case: Molded plastic, SOD-123HT/Mini SMA.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting Position : Any.
- Weight: 0.011 grams approx.



Electrical Characteristics (at T_A=25°C unless otherwise noted)

Parameter	Symbol	CDBMH T340-HF	CDBMH T360-HF	CDBMH T3100-HF	Unit
Repetitive peak reverse voltage	V _{RRM}	40	60	100	V
Continuous reverse voltage	V _R	40	60	100	V
RMS voltage	V _{RMS}	28	42	70	V
Max. Forward rectified current	I _O	3.0			A
Maximum forward voltage at I _F =3.0A	V _F	0.55	0.70	0.85	V
Max. Forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	50			A
Max. Reverse current	V _R =V _{RRM} T _J =25°C	I _R	0.2		mA
	V _R =V _{RRM} T _J =100°C	I _R	10		
Thermal resistance	Junction to ambient	R _{θJA}	70		°C/W
	Junction to case	R _{θJC}	35		°C/W
Typ. Diode junction capacitance (Note 1)	C _J	160			pF
Operating temperature	T _J	-55 to +125	-55 to +150		°C
Storage temperature range	T _{STG}	-65 to +175			°C

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

Rating and Characteristic Curves (CDBMHT340-HF Thru. CDBMHT3100-HF)

Fig.1- Typical Forward Current Derating Curve

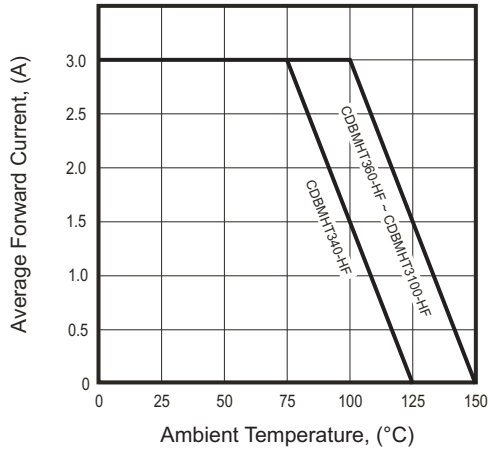


Fig.2- Typical Forward Characteristics

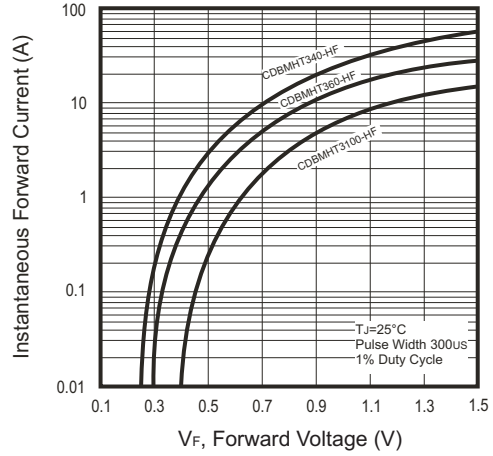


Fig.3- Maximum Non-repetitive Forward Surge Current

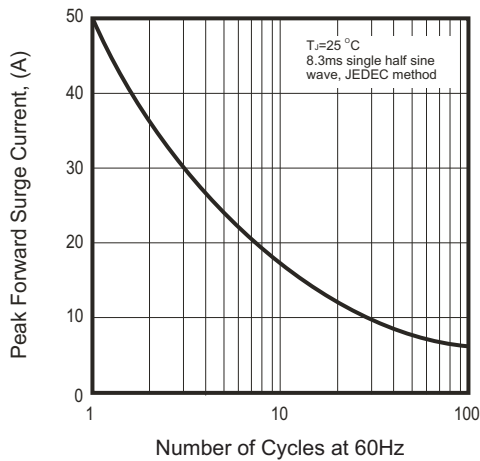


Fig.4- Typical Junction Capacitance

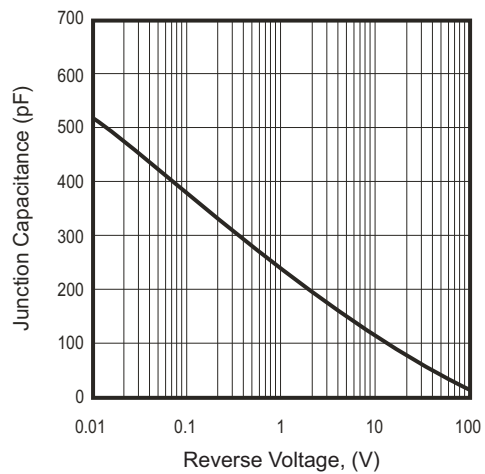
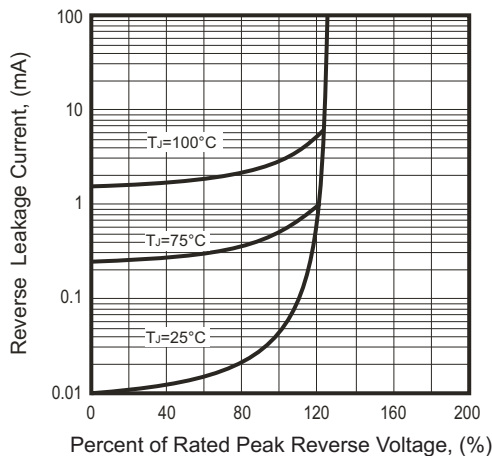
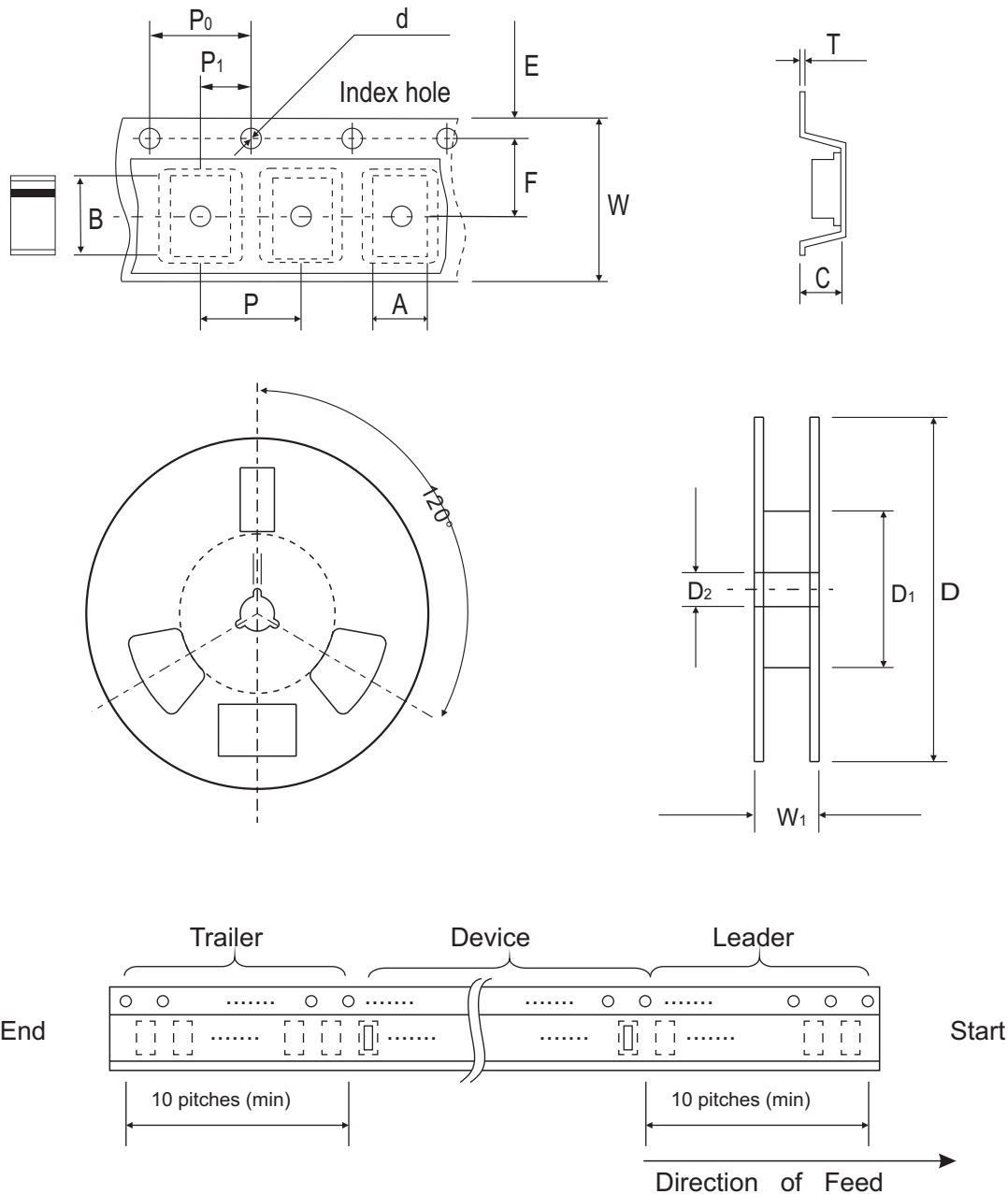


Fig.5- Typical Reverse Characteristics



Reel Taping Specification



Mini-SMA / SOD-123HT	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

Mini-SMA / SOD-123HT	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

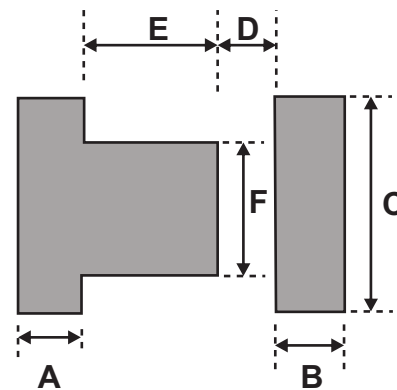
Part Number	Marking Code
CDBMHT340-HF	34
CDBMHT360-HF	36
CDBMHT3100-HF	310



xx / xxx = Product type marking code

Suggested PAD Layout

SIZE	Mini-SMA/SOD-123HT	
	(mm)	(inch)
A	0.90	0.035
B	0.90	0.035
C	1.90	0.075
D	0.70	0.028
E	1.10	0.043
F	1.20	0.047



Standard Packaging

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