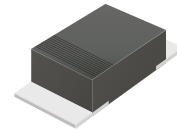


ACDBMHT340-HF

Reverse Voltage: 40 Volts
Forward Current: 3.0 Amp
RoHS Device
Halogen Free



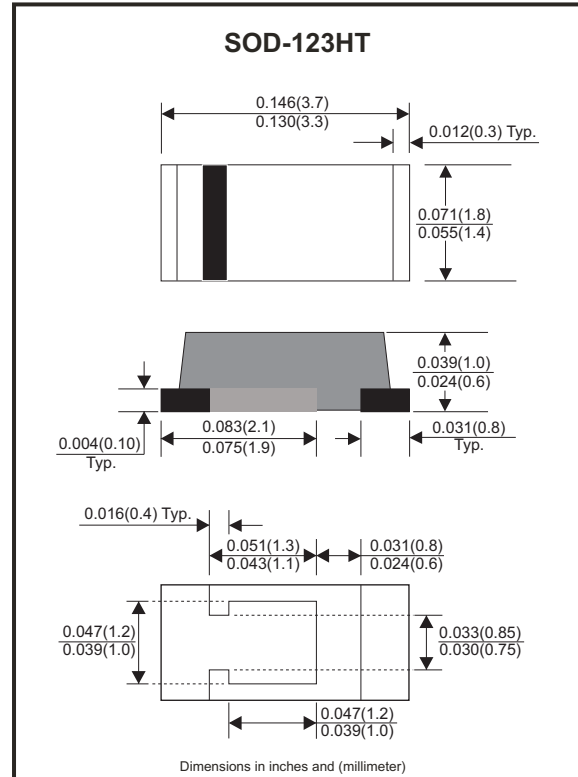
Features

- Excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability, Ultra high-speed switching.
- Guardring for overvoltage protection.
- Silicon epitaxial planar chip, metal silicon junction.
- Comply with AEC-Q101

Mechanical data

- Epoxy : UL94V-0 rated flame retardant.
- Case: Molded plastic, SOD-123HT.
- 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°C unless otherwise noted)

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V _{RRM}	40	V
RMS voltage	V _{RMS}	28	V
Continuous reverse voltage	V _R	40	V
Maximum forward voltage @ I _F =3.0A	V _F	0.55	V
Operating temperature	T _J	-55 to +125	°C
Storage temperature	T _{STG}	-65 to +175	°C

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

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Forward rectified current	See Fig.1	I _O			3.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I _{FSM}			50	A
Reverse current	V _R = V _{RRM} T _J = 25°C	I _R			0.2	mA
	V _R = V _{RRM} T _J = 100°C				10	
Thermal resistance	Junction to ambient	R _{θJA}		70		°C/W
	Junction to case	R _{θJC}		35		
Diode Junction capacitance	f=1MHz and applied 4V DC reverse voltage	C _J		160		pF

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REV: A

Rating and Characteristic Curves (ACDBMHT340-HF)

Fig.1 - Typical Forward Current Derating Curve

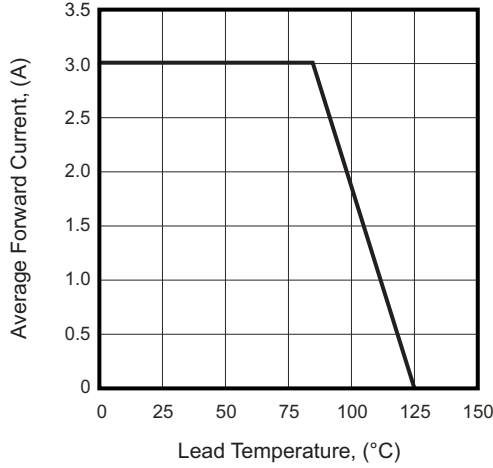


Fig.2 - Typical Forward Characteristics

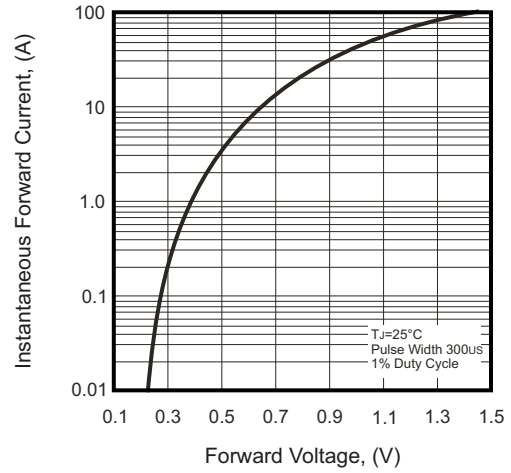


Fig.3 - Maximum Non-repetitive Forward Surge Current

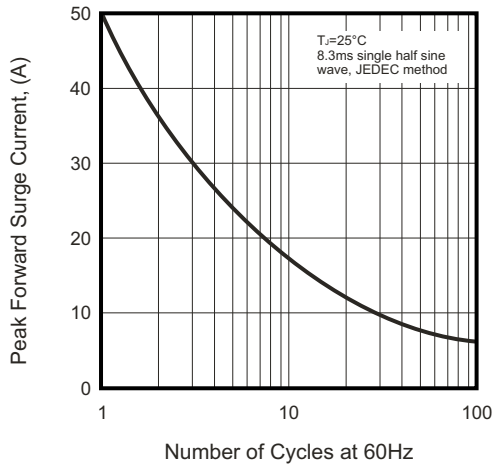


Fig.4 - Typical Junction Capacitance

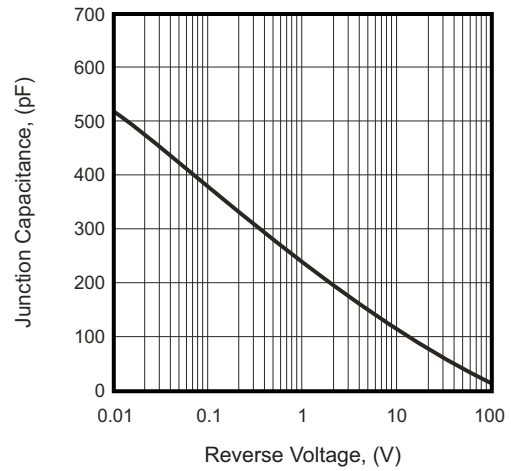
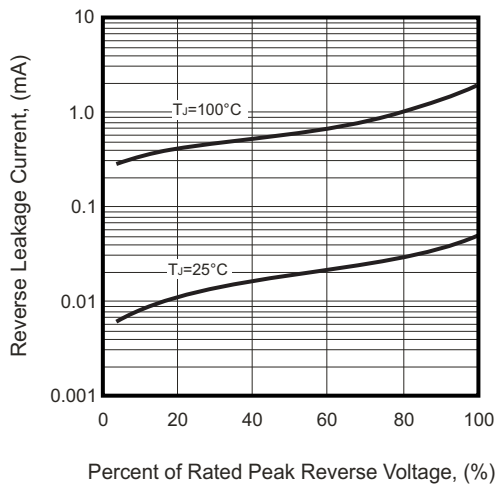
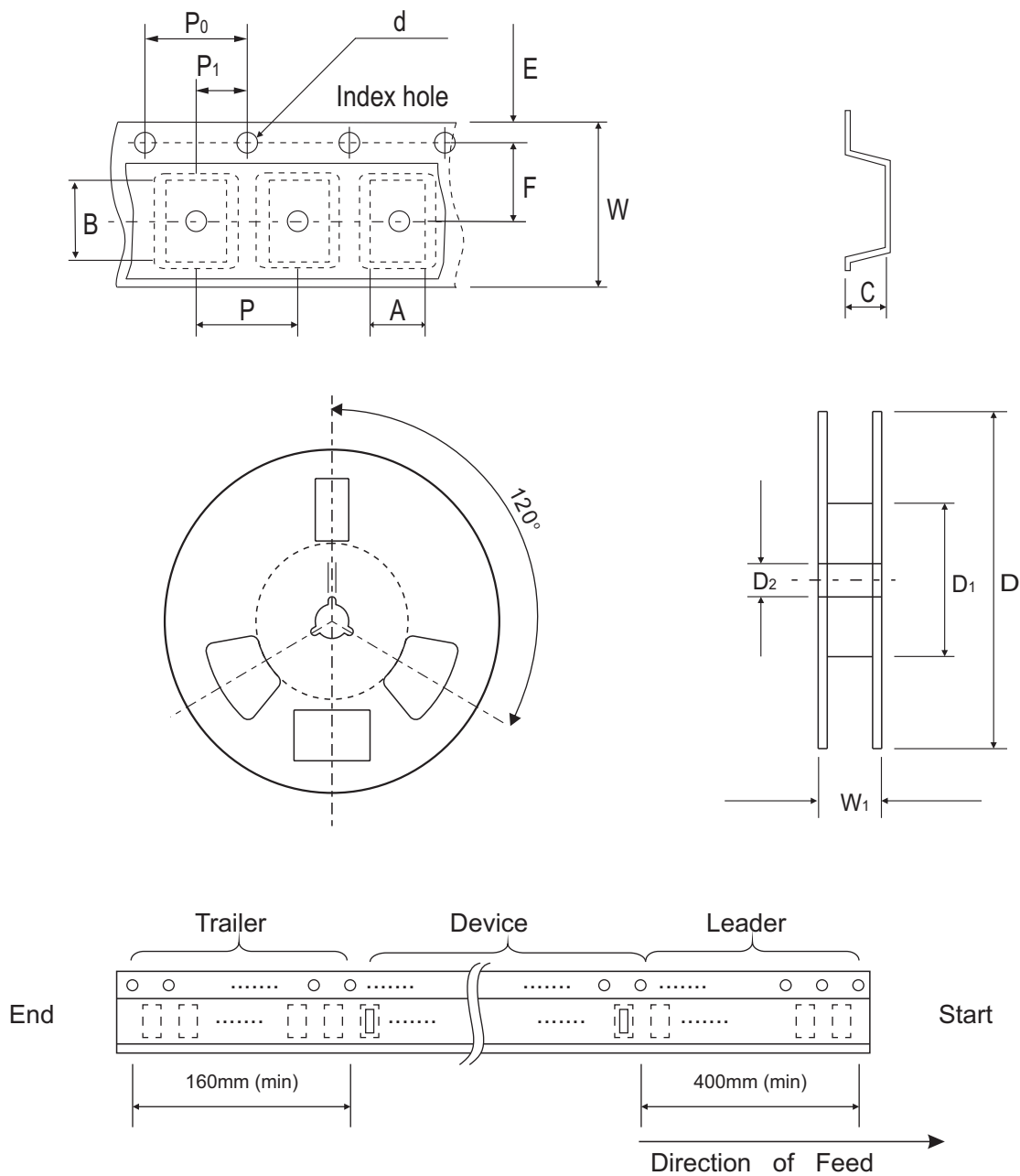


Fig.5 - Typical Reverse Characteristics



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Reel Taping Specification



SOD-123HT	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(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-123HT	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 ± 0.30	11.40 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.10	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 ± 0.012	0.449 ± 0.039

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REV: A