



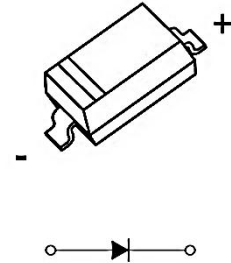
1N4448W

FAST SWITCHING DIODE

SOD-123

FEATURES

- *Small Package
- *Low Reverse Current
- *Fast Switching Speed
- *Surface Mount Package Ideally Suited for Automatic Insertion



MARKING



The marking bar indicates the cathode
Solid dot = Green molding compound device,
if none, the normal device.

ABSOLUTE MAXIMUM RATINGS (TC=25°C, unless otherwise specified)

SYMBOL	PARAMETER	LIMIT	UNIT
VRM	Non-Repetitive Peak Reverse Voltage	100	V
VRRM	Peak Repetitive Peak Reverse Voltage	75	V
VRWM	Working Peak Reverse Voltage		
VR	DC Blocking Voltage		
VR(RMS)	RMS Reverse Voltage	53	V
IFM	Forward Continuous Current	500	mA
IO	Average Rectified Output Current	250	mA
IFSM	Non-Repetitive Peak Forward Surge Current(tp=8.3ms)	2.0	A
Pd	Power Dissipation	500	mW
RθJA	Thermal Resistance from Junction to Ambient	250	°C/W
Tj, Tstg	Operation Junction and Storage Temperature Range	-55 to 150	°C

ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V(BR)R	I _R =10μA	75			V
Forward voltage	V _{F1}	I _F =5mA	0.62		0.72	V
	V _{F2}	I _F =10mA			0.855	V
	V _{F3}	I _F =100mA			1.0	V
	V _{F4}	I _F =150mA			1.25	V



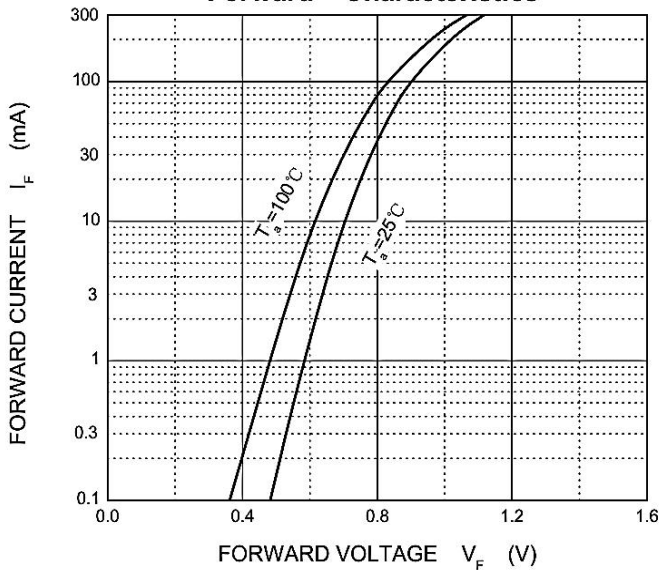
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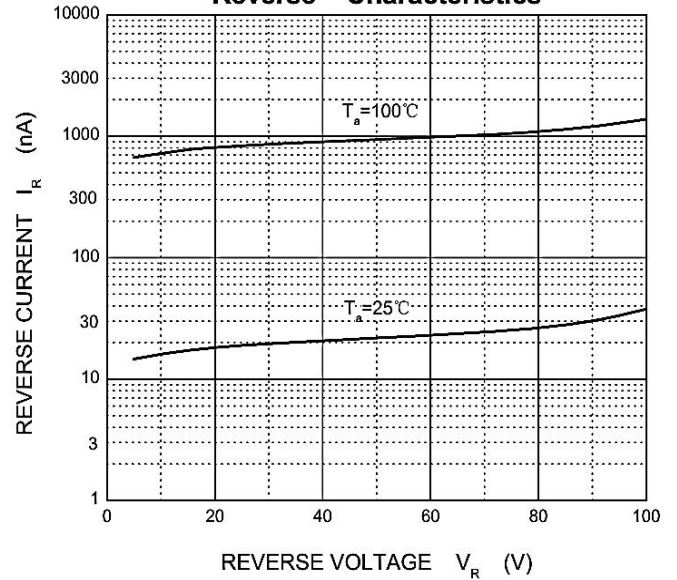
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse current	IR1	VR=75V			2.5	μA
	IR2	VR=20V			25	nA
Capacitance between terminals	CT	VR=0V, f=1MHz			4	pF
Reverse recovery time	trr	IF=IR=10mA Irr=0.1XIR, RL=100Ω			4	ns

TYPICAL CHARACTERISTICS

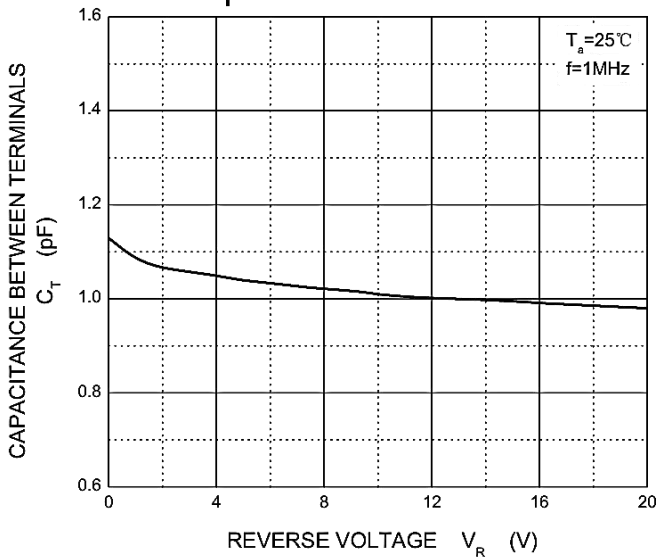
Forward Characteristics



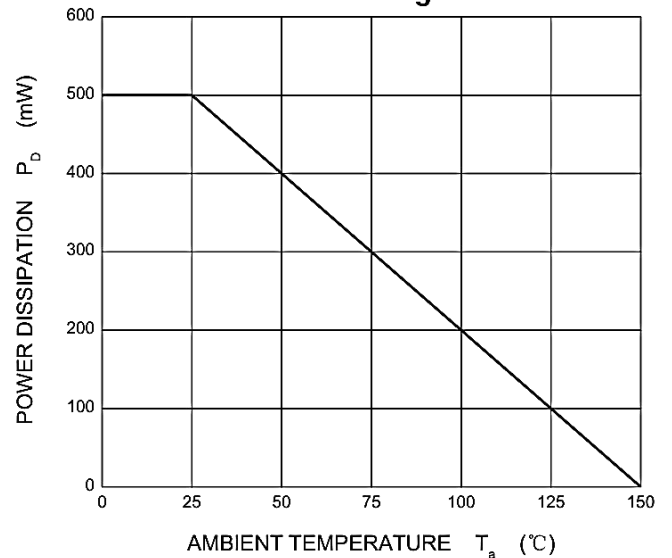
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

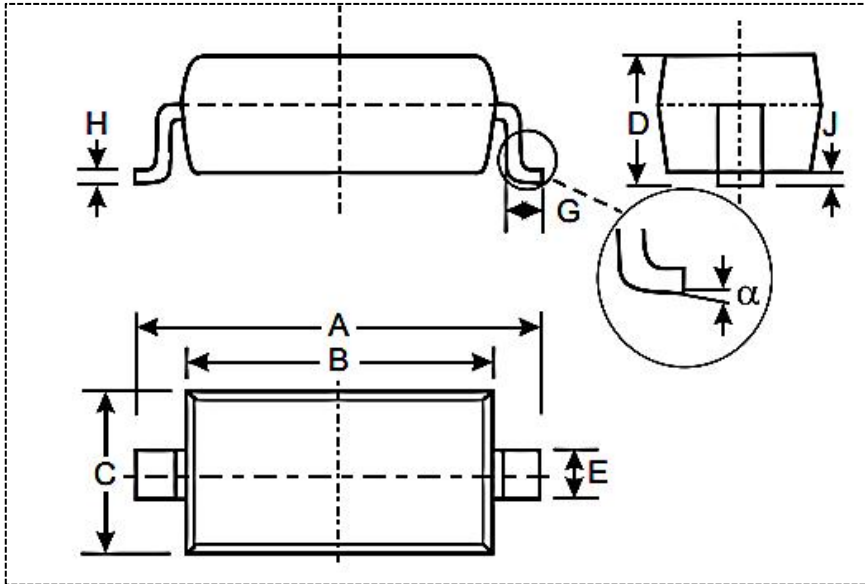




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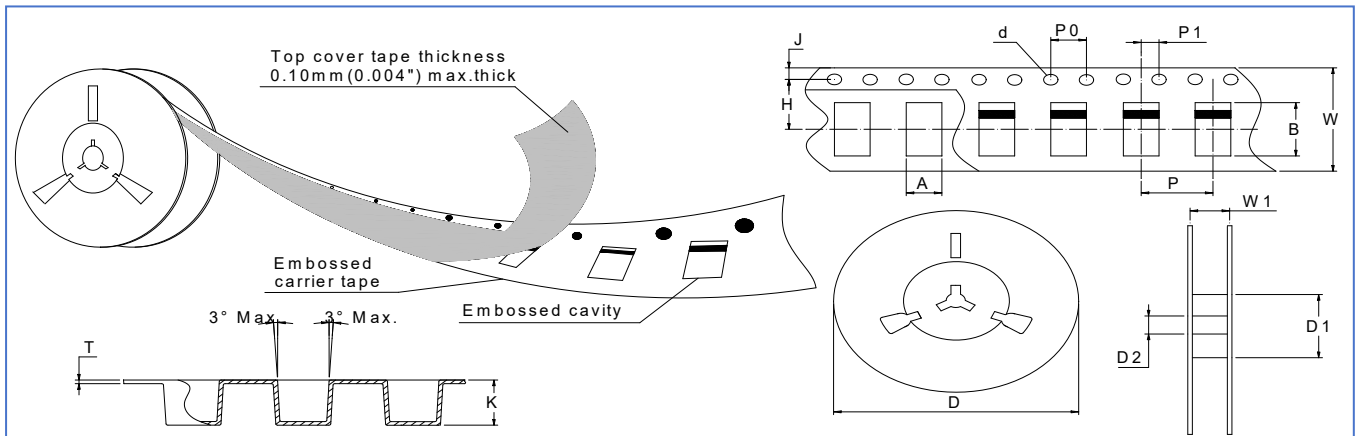
FAST SWITCHING DIODE

SOD-123 PACKAGE OUTLINE DIMENSIONS



SOD-123		
Dim	Min	Max
A	3.55	3.85
B	2.60	2.80
C	1.50	1.70
D	—	1.20
E	0.55 Typical	
G	0.25	—
H	0.10 Typical	
J	—	0.10
α	0°	8°
All Dimensions in mm		

REEL PACKING



SYMBOL	A	B	d	D*	D1	D2	J	H	K	P	P0	P1	T	W	W1
	Max.	Max.	Typ.	/	Min.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Min.
mm(inch)															
SOD123	2.1(0.083)	4.0(0.157)	Φ1.55(0.061)	330.0/178.0(13/7)	50.0(1.969)	13.0(0.512)	1.75(0.069)	3.50(0.138)	1.60(0.063)	4.00(0.157)	4.00(0.157)	2.00(0.079)	0.25(0.010)	8.15(0.321)	10.5(0.413)
*NOTE: D=13inch Q.TY PER REEL=10K ; D=7inch Q.TY PER REEL=3K															