

■ **FEATURES**

- VR 100V
- I_{FAV} 250mA

■ **TYPICAL APPLICATIONS**

- Extreme fast switches

■ **MECHANICAL DATA**

- **Package:** SOD123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** T5

■ **MAXIMUM RATINGS** (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V _{RRM}	V		100
Reverse voltage	V _R	V	IR=100uA	100
Peak forward surge current	I _{FSM}	A	Pulse width=1 us Pulse width=1 s	2 0.5
Average forward current	I _{FAV}	mA		250
Power dissipation	P _{tot}	mW		500
Maximum junction temperature	T _j	°C		-55 to +150
Storage temperature range	T _{stg}	°C		-55to +150
Thermal Resistance Junction to Ambient Air	RθJA	°C/W		315

■ **ELECTRICAL CHARACTERISTICS** (T_a=25°C Unless otherwise specified)

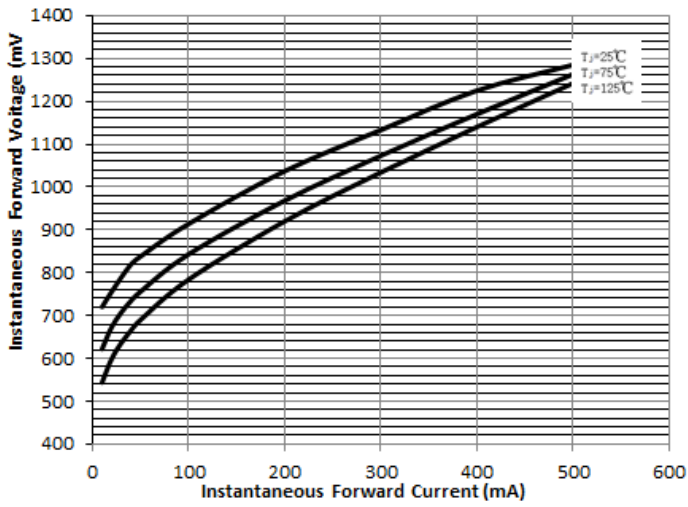
PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V _R	V	IR=100uA	100	
Forward Voltage	V _F	V	IF=100mA		1.00
Reverse Leakage Current	I _{R1}	nA	VR=20V		25
	I _{R2}	nA	VR=75V		200
Capacitance	C	pF	VR=0V,f=1MHz		4
Reverse Recovery Time	T _{rr}	ns	IF=IR=10mA, I _{rr} =0.1*IR, RL=100Ω		4

■ **PACKAGING INFORMATION**

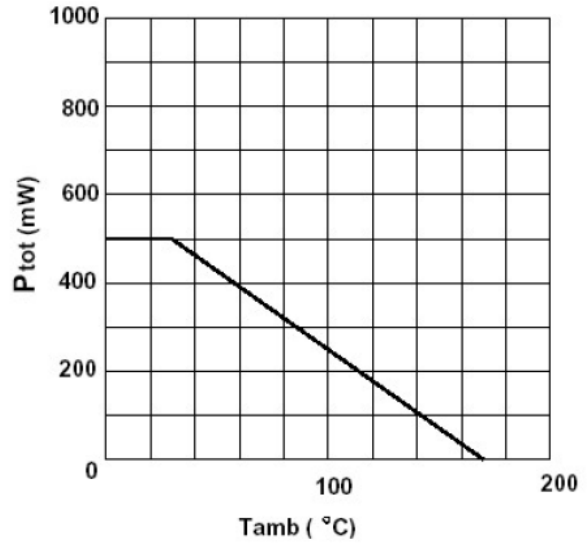
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4448W	F2	Approximate 0.011	3000	30000	120000	7" reel

■ **CHARACTERISTICS (TYPICAL)**

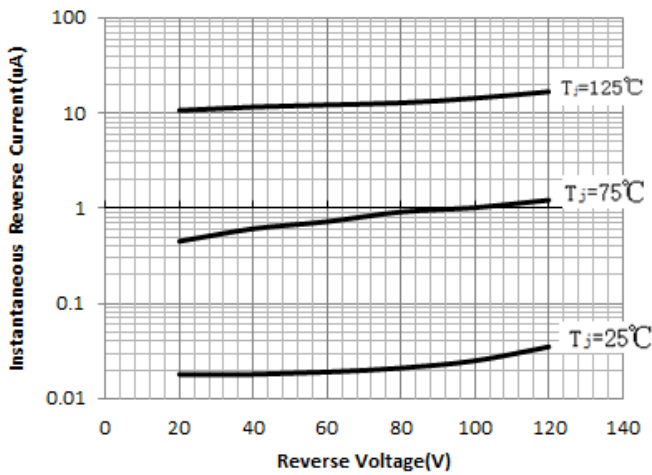
Typical Instantaneous Forward Characteristics



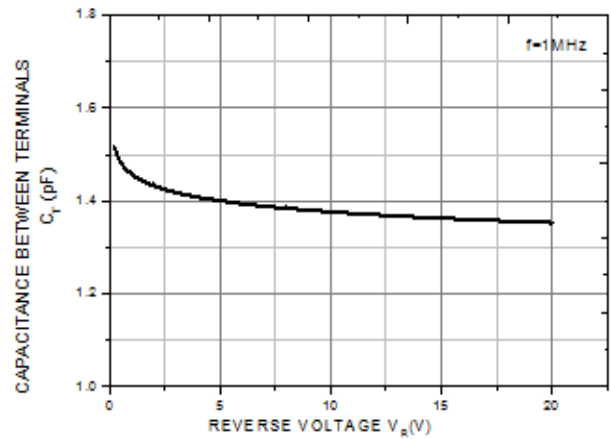
Admissible power dissipation versus ambient temperature



Typical Reverse Characteristics

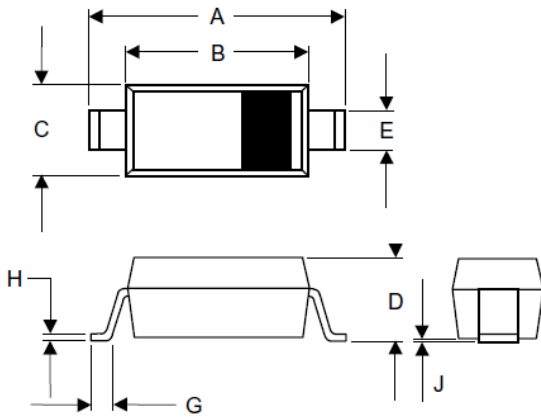


Capactance Characteristics



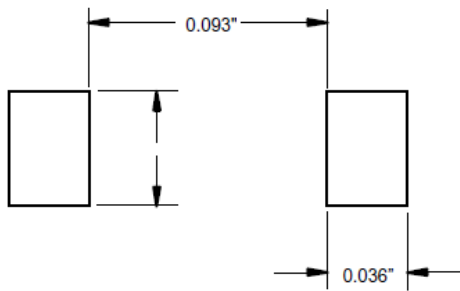
■ **OUTLINE DIMENSIONS**

SOD123



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

■ **SUGGESTED PAD LAYOUT**



Unit: inch