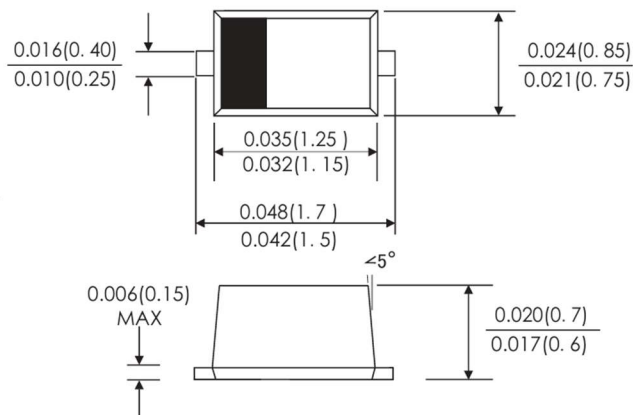


SWITCHING DIODE

Features

- For surface mounted applications
- Silicon epitaxial planar diode
- 150mW power dissipation
- Fast switching diode
- Ideal for automated placement

SOD-523FL



Dimensions in inches and (millimeters)

Order Information

Part Number	Package	Marking	Quantity
1N4448WT	SOD-523FL	T5	3000

Absolute Maximum Ratings (T=25°C, unless otherwise specified)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
DC Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{O(AV)}$	250	mA
Forward Continuous Current	I_{FM}	500	mA
Non-Repetitive Peak Forward Surge Current (@t = 1.0µs)	I_{FSM}	2	A
Power Dissipation	P_D	150	mW
Operating Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	°C/W

Electrical Characteristics (T=25°C, unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 5.0\mu A$	75		V
Reverse Current	I_R	$V_R = 20V$		0.025	μA
		$V_R = 75V$		1	
Forward Voltage	V_F	$I_F = 5mA$	0.62	0.72	V
		$I_F = 10mA$		0.855	
		$I_F = 100mA$		1	
		$I_F = 150mA$		1.25	
Junction Capacitance	C_J	$V_R=0V, f=1MHZ$		4	pF
Reverse Recovery Time	T_{rr}	$I_F=10mA, I_R=10mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		4	ns

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

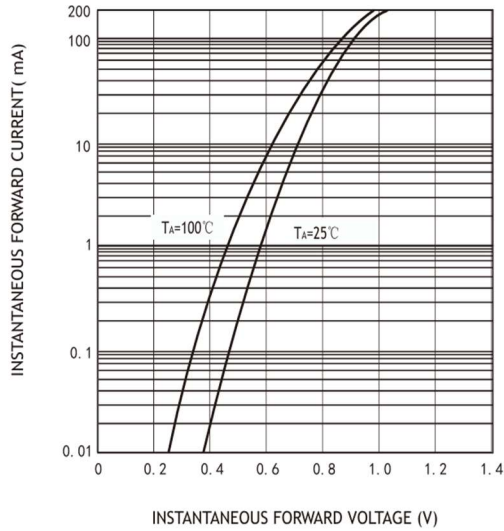


FIG.2-TYPICAL REVERSE CHARACTERISTICS

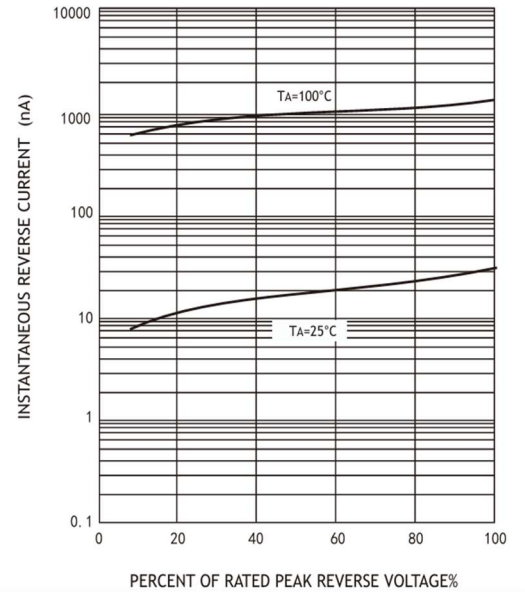


FIG.3-TYPICAL JUNCTION CAPACITANCE

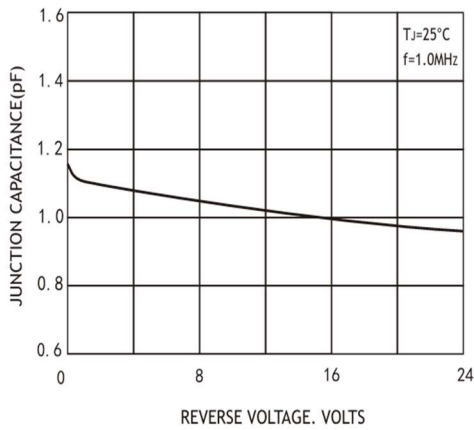


FIG.4-POWER DERATING CURVE

