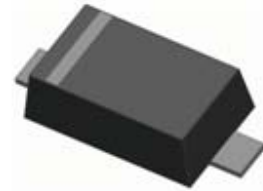


200mW SOD-523 SURFACE MOUNT
Very Small Outline Flat Lead Plastic Package
General Purpose Application
Fast Switching Diode

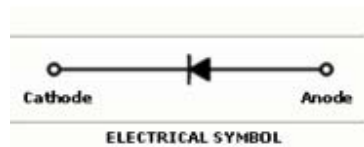
Specification Features:

- Fast Switching Device ($T_{RR} < 4.0$ nS)
- General Purpose Diodes
- Extremely Small SOD-523 Package
- Flat Lead SOD-523 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

Green Product



SOD-523 Flat Lead



Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
V_{RSM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Repetitive Peak Reverse Voltage	75	V
I_{FRM}	Repetitive Peak Forward Current	300	mA
I_O	Continuous Forward Current	150	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current (Pulse Width=1us)	2	A
I_T^2	Typical Current Squared Time	0.02	A^2S

These ratings are limiting values above which the serviceability of the diode may be impaired.

DEVICE MARKING CODE:

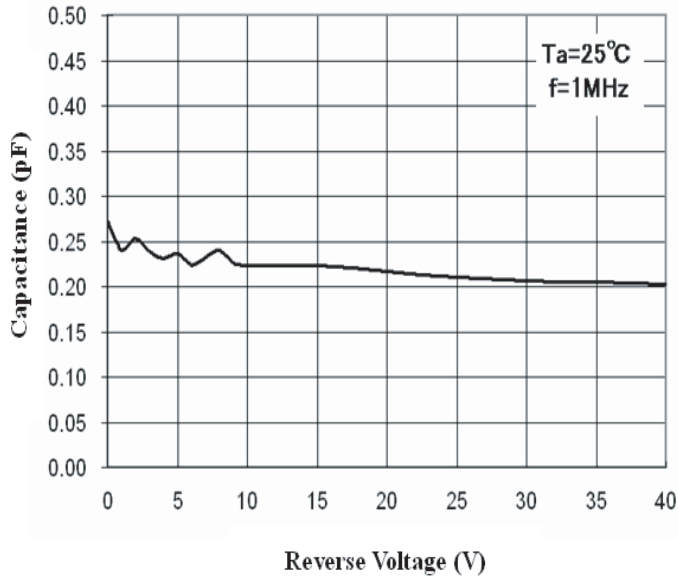
Device Type	Device Marking
1N4148WT	E1
1N4448WT	E2
1N914BWT	E3

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

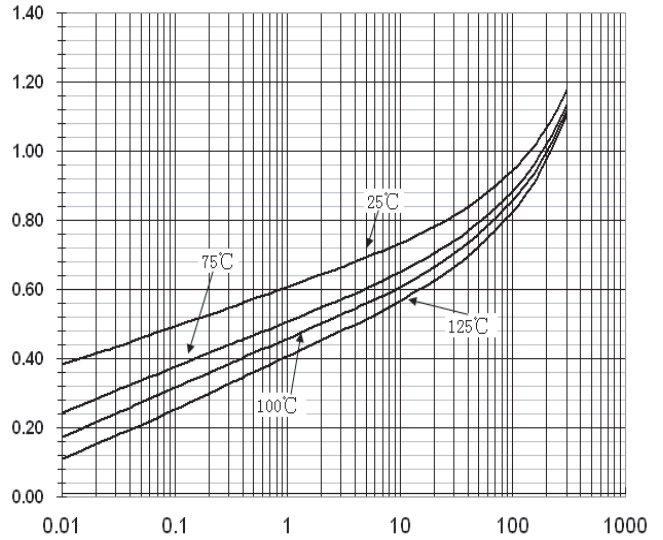
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	$I_R=100\mu\text{A}$ $I_R=5\mu\text{A}$	100 75		Volts
I_R	Reverse Leakage Current	$V_R=20\text{V}$ $V_R=75\text{V}$		25 5	nA μA
V_F	Forward Voltage	1N4448WT, 1N914BWT $I_F=5\text{mA}$ 1N4148WT $I_F=10\text{mA}$ 1N4448WT, 1N914BWT $I_F=100\text{mA}$	0.62	0.72 1.0 1.0	Volts
T_{RR}	Reverse Recovery Time	$I_F=10\text{mA}$ $I_R=60\text{mA}$ $R_L=100\Omega$ $I_{RR}=1\text{mA}$		4	nS
C	Capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$		4	pF

RATING AND CHARACTERISTICS CURVES (1N4148WT)

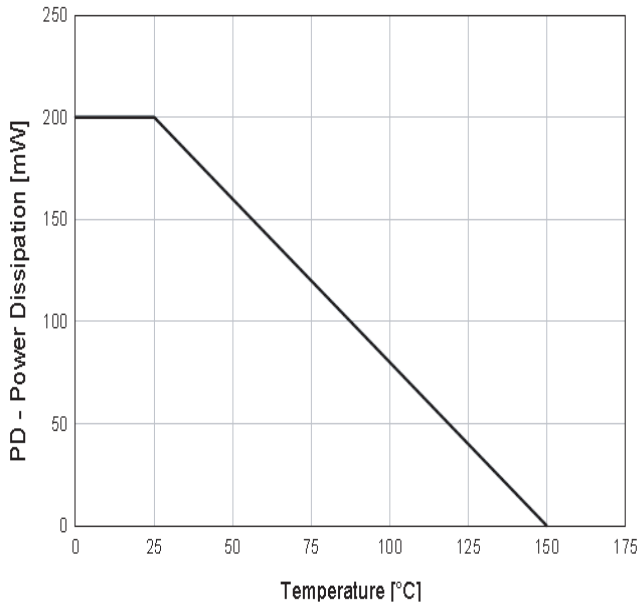
Total Capacitance



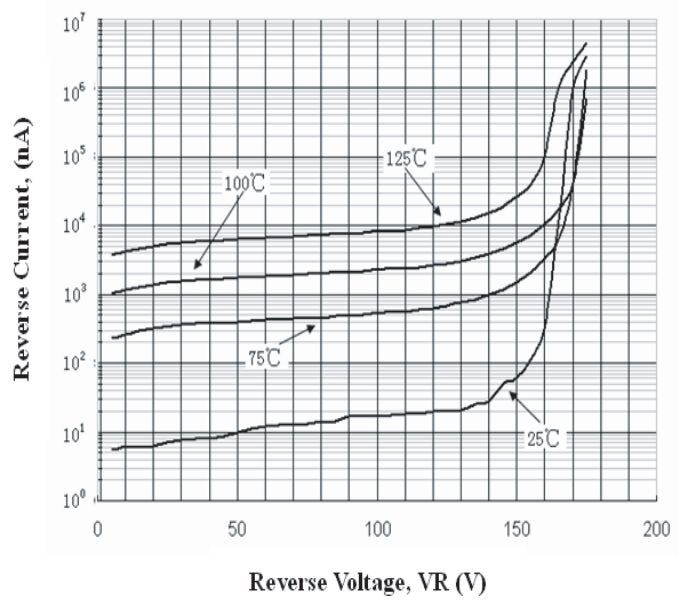
Forward Voltage vs Ambient Temperature



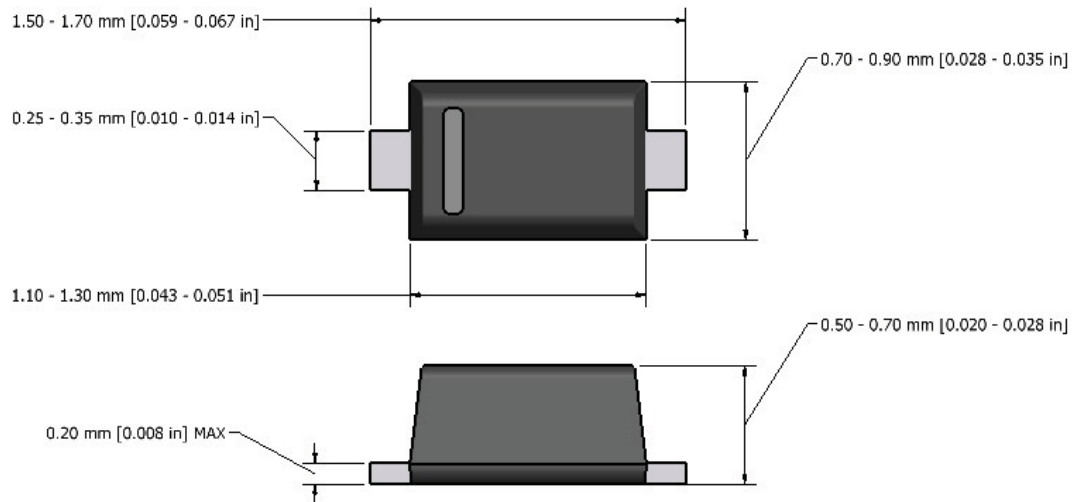
Power Derating Curve



Reverse Current vs Reverse Voltage



Flat Lead SOD-523 Package Outline



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

PACKAGING OF DIODE

REEL PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-523	-T	5,000	---	---	178	386*265*215	180,000	---

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