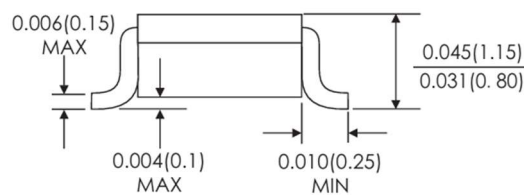
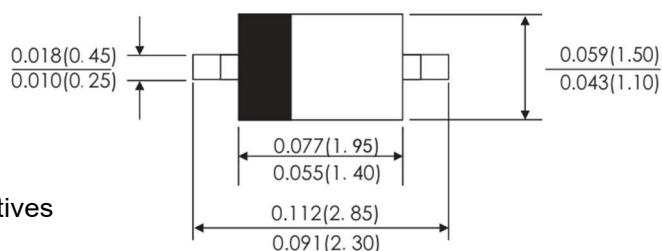


SWITCHING DIODE

Features

- For surface mounted applications
- Silicon epitaxial planar diode
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

SOD-323



Dimensions in inches and (millimeters)

Order Information

Part Number	Package	Marking	Quantity
1N4148WS	SOD-323	T4	3000

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{O(AV)}$	150	mA
Surge forward current (t < 1s)	I_{FSM}	350	mA
Power Dissipation	P_D	200	mW
Operating Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

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

Parameter	Symbol	Test Condition	Min	Max	Unit
Reverse Leakage Current	I_R	$V_R = 20V, T_J = 25^\circ C$		0.025	μA
		$V_R = 75V, T_J = 25^\circ C$		1	
		$V_R = 25V, T_J = 150^\circ C$		30	
		$V_R = 75V, T_J = 150^\circ C$		50	
Forward Voltage	V_F	$I_F = 1mA$		0.715	V
		$I_F = 10mA$		0.855	
		$I_F = 50mA$		1	
		$I_F = 150mA$		1.25	
Total Capacitance	C_{tot}	$V_R=0, f=1MHZ$		4	pF
Reverse Recovery Time	T_{rr}	$I_F=10mA, I_R=1mA$ $V_R=6V, R_L=100\Omega$		4	ns

RATINGS AND CHARACTERISTIC CURVES

FIG 1-FORWARD CHARACTERISTICS

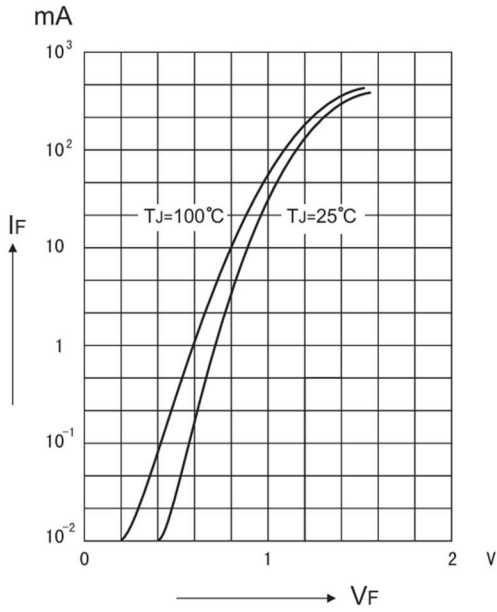


FIG 2: DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

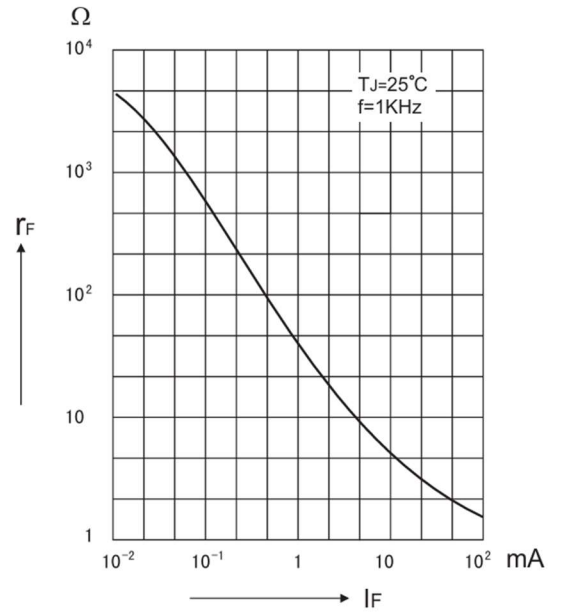


FIG. 3-RELATIVE CAPACITANCE VERSUS VOLTAGE

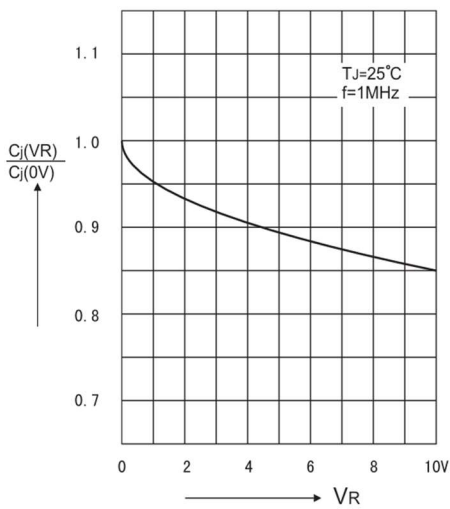


FIG 4: ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

