1N4148WS

表面安装开关二极管

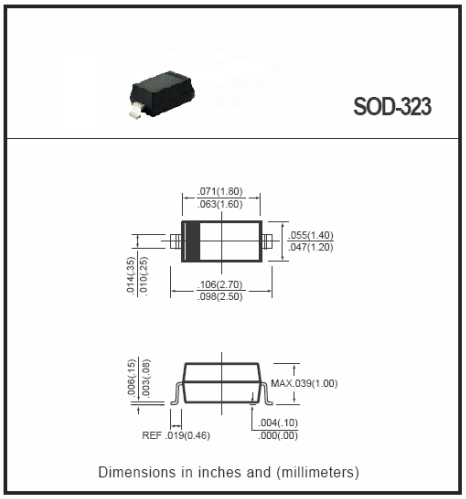
反向电压**75 V**

功率**0.2 W**

Surface Mount Switching Diodes

Reverse Voltage 75 V

Power 0.2 W



FEATURES

Fast switching speed..
Surface mount package ideally suited for automated assembly processes
High Conductance
Available in Lead Free Version

Mechanical Data

Case: Molded plastic body
Terminals: Solder plated
Polarity: Color band denotes cathode end
Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbo	Limits	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f >=50 Hz @Ta=25℃	I_O	150	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	2.0	A
Power Dissipation Derate Above 25°C	P_D	200	mW
Maximum Forward Voltage	V_F	1.0@I_F=10mA	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J= 25°C	I_R	2.5	μA
Maximum Thermal Resistance	$R_{\theta JA}$	357	°C / W
Typical Junction Capacitance(Notes1)	C_J	4.0	pF
Maximum Reverse Recovery (Notes2)	T_{RR}	4.0	ns
Storage Temperature Range	T_J	-55 TO +125	°C

NOTE:

1. CJ at V_R=0, f=1MHZ
2. From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω

Typical Characteristics

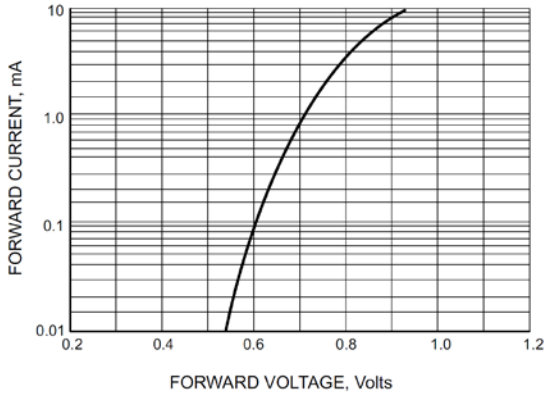


Fig.1 FORWARD VOLTAGE

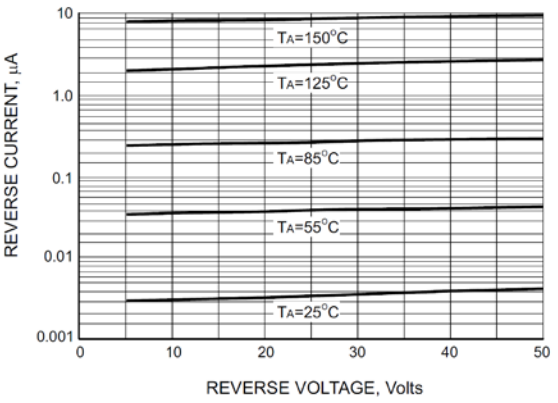


Fig.2 LEAKAGE CURRENT

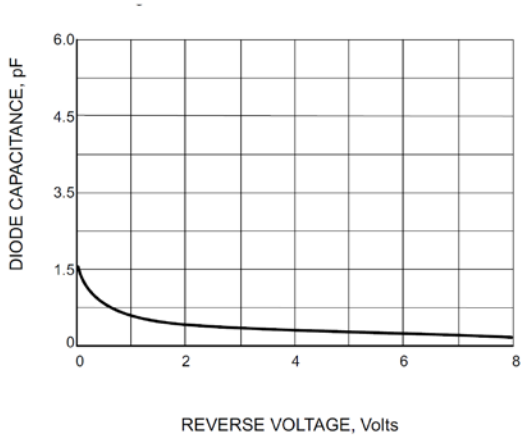
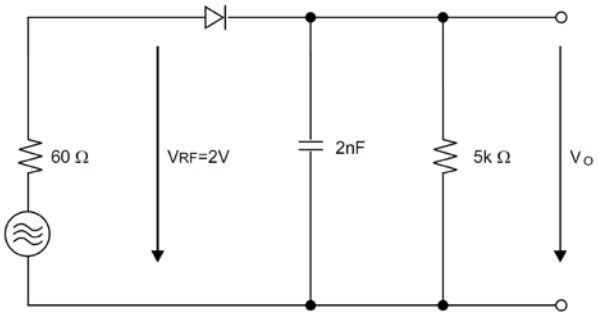
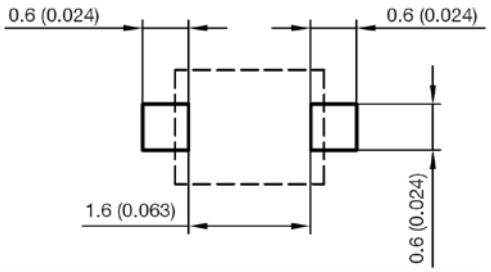


Fig.3 TYPICAL CAPATICANCE



RECTIFICATION EFFCIENCY MEASUREMENT CIRCUIT

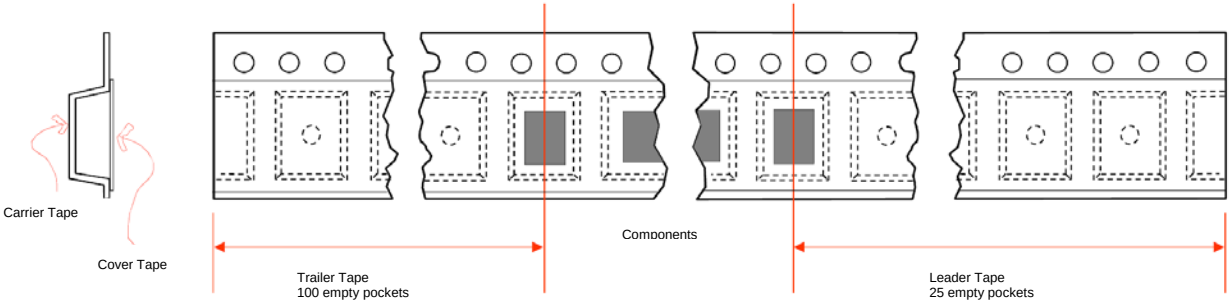
Mounting Pad layout



Packing

Part number	Component Package	Quantity	Packaging Option
1N4148WS	SOD-323	3000 10000	Tape & Reel – 8mm/7" tape Tape & Reel – 8mm/13" tape

SOD-323 Tape Leader and Trailer Configuration



Tape and Reel Specification