

Silicon Epitaxial Planar Diode

FEATURES

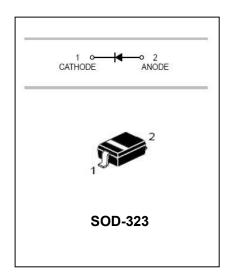
- Fast Switching Speed:trr=4ns Surface Mount Package Ideally Suited For **Automatic Insertion**



- For General Purpose Switching **Applications**
- **High Conductance**
- Available in Lead Free Version
- **ROHS** compliant
- MSL: 3

APPLICATIONS

Surface mount fast switching diode



ORDERING INFORMATION

Type No.	Marking	Package Code
1N4148WSX	T4	SOD-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V _{RRM} V _{RWM} V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Average Rectified Output Current	Io	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 µs @t=1.0 s	I _{FSM}	2.0 1.0	A
Power Dissipation	P _d	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Rage	T_{j} , T_{STG}	-65 to+150	\mathbb{C}

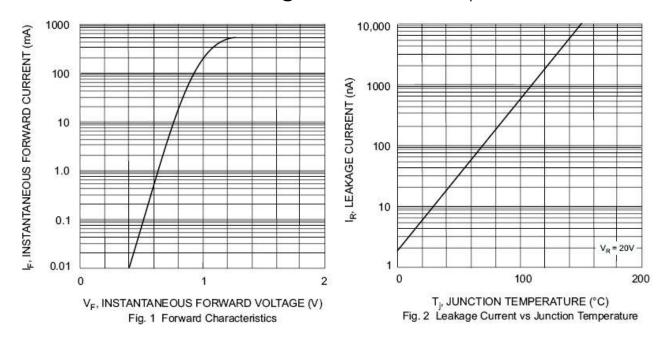


Silicon Epitaxial Planar Diode

ELECTRICAL CHARACTERISTICS @ $Ta=25^{\circ}C$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	I _R =1.0μA
Forward Voltage	V _F	-	0.715 0.855 1.0 1.25	V	$I_F=1.0$ mA $I_F=10$ mA $I_F=50$ mA $I_F=150$ mA
Reverse Current	I _R	-	1.0 25	μA nA	V _R =75V V _R =20V
Junction Capacitance	CJ		2.0	pF	V _R =0,f=1.0MHz
Reverse Recovery Time	t _{rr}	-	6.0	ns	$I_F=I_R=10$ mA, $I_{rr}=0.1\times I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

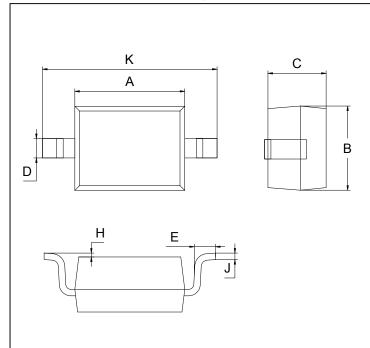


Silicon Epitaxial Planar Diode

PACKAGE OUTLINE

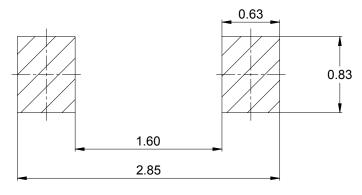
Plastic surface mounted package

SOD-323



SOD-323		
Dim	Min	Max
Α	1.60	1.80
В	1.20 1.40	
С	0.80	0.90
D	0.25	0.35
Е	0.22	0.42
Н	0.02	0.1
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
1N4148WSX	SOD-323	3000/Tape&Reel