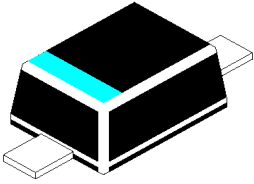


SILICON EPITAXIAL SWITCHING DIODE

1N4148WS

**SOD-323
PLASTIC PACKAGE**



Marking

1N4148WS= W2 with cathode band

Fast Switching Diode

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	75	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Average rectified Current half wave rectification with resistive load $f > 50$ Hz	$*I_{F(AV)}$	150	mA
Surge Forward Current $t < 1s$ and $T_j=25^\circ C$	I_{FSM}	350	mA
Power Dissipation @ $T_{amb}=25^\circ C$	$*P_{tot}$	200	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	- 65 to +150	$^\circ C$

THERMAL RESISTANCE

Junction to Ambient in free air	$*R_{th(j-a)}$	650	$^\circ C/W$
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*Valid provided that electrodes are kept at ambient Temperature

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ C$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F=10mA$		1.0	V
Reverse Current	I_R	$V_R=20V$		25	nA
		$V_R=20V, T_j=150^\circ C$		50	μA
		$V_R=75V$		5.0	μA

DYNAMIC CHARACTERISTICS

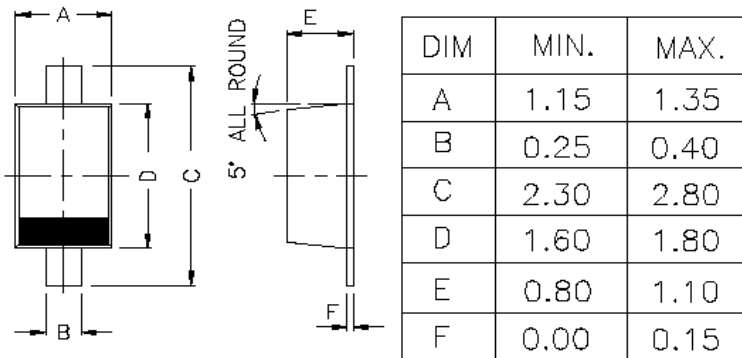
Diode Capacitance	C_d	$V_R=0V, f=1MHz$		4.0	pF
Voltage Rise When Switching On (tested with 50ms pulses)	V_{fr}	tested with=50mA pulses, $t_p=0.1\mu s$, rise time= <30 ns, $t_p=$ (5 to 100) KHZ		2.5	ns
Reverse Recovery Time	t_{rr}	$I_F=10mA$, to $I_R=60mA$ $R_L=100 \Omega$ Measured @ $I_R=1mA$		4.0	ns
Rectification Efficiency	η_v	$f=100MHz, V_{RF}=2V$	0.45		

1N4148WSRev2 120712E

1N4148WS

**SOD-323
PLASTIC PACKAGE**

PACKAGE SOD-323 FL



All dimensions are in mm

CATHODE IS MARKED BY BAND

1N4148WSRev2 120712E



Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



Customer Notes

1N4148WS

**SOD-323
PLASTIC PCAKAGE**

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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