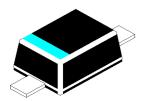




SILICON EPITAXIAL SWITCHING DIODE

1N4148WS

SOD-323 PLASTIC PCAKAGE



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 recified Current half wave rectification with resistive load f >50 Hz	*I _{F (AV)}	150	mA
Surge Forward Current t < 1s and T _j =25°C	I _{FSM}	350	mA
Power Dissipation @ T _{amb} =25°C	*P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to +150	°C

THERMAL RESISTANCE

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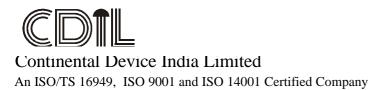
^{*}Valid provided that electrodes are kept at ambient Temperature

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless specified otherwise)

DESCRIPTION SYMBOL | TEST CONDITION

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 _i =150°C		50	μΑ
		V _R =75V		5.0	μΑ
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 μ 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 Ω Measured @ I_R =1mA		4.0	ns
Rectification Efficiency	ην	f=100MHz, V _{RF} =2V	0.45		

1N4148WSRev2 120712E



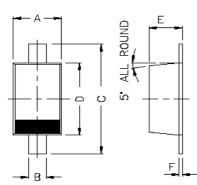




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SOD-323 PLASTIC PCAKAGE

PACKAGE SOD-323 FL

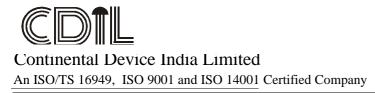


MIC	MIN.	MAX.
Α	1.15	1.35
В	0.25	0.40
С	2.30	2.80
D	1.60	1.80
Е	0.80	1.10
F	0.00	0.15

All dimensions are in mm

CATHODE IS MARKED BY BAND

1N4148WSRev2 120712E







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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