

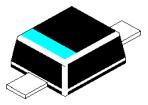
# Continental Device India Limited

An ISO/TS 16949 and ISO 9001 Certified Company





# SILICON EPITAXIAL PLANAR SWITCHING DIODE



1N4148WT

SOD-523 PLASTIC PCAKAGE

Marking Code "A"
With Cathode Band

## **Features**

- 1. Fast Switching Speed
- 2. Ultra-small Surface Mount Package
- 3. For General Purpose Switching Applications
- 4. High Conductance

ABSOLUTE MAXIMUM RATINGS ( $T_a = 25$ °C)

DESCRIPTION		SYMBOL	VALUE	UNIT
Non-Repetitive Peak Reverse Voltage		$V_{RM}$	100	V
Reverse Voltage		$V_R$	75	V
Average Rectified Forward Current		I <sub>F (AV)</sub>	125	mA
Forward Continuous Current		I <sub>FM</sub>	250	mA
Non-Repetitive Forward Peak	t = 1us	_	2	Α
Surge Current	t = 100ms	I <sub>FSM</sub>	1	Α
Power Dissipation		$P_{tot}$	150	mW
Thermal Resistance Junction to Ambient Air		$R_{thJA}$	833	°C/W
Operating Temperature Range		T <sub>j</sub>	- 65 to +150	°C
Storage Temperature Range		$T_{stg}$	- 65 to +150	°C

ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless specified otherwise)

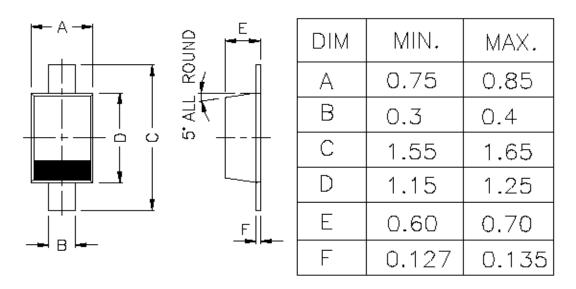
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I <sub>R</sub> =1uA	75		V
Forward Voltage		I <sub>F</sub> =1mA	I <sub>F</sub> =1mA		
	$V_{F}$	I <sub>F</sub> =10mA		0.855	V
	VF	I <sub>F</sub> =50mA		1	
		I <sub>F</sub> =150mA		1.25	
Peak Reverse Current		V <sub>R</sub> =75V		1	uA
		V <sub>R</sub> =20V		25	nA
	I <sub>R</sub>	$V_R = 75V, T_j = 150^{\circ}C$		50	uA
		$V_R = 25V, T_j = 150^{\circ}C$		30	uA
Total Capacitance	Ст	$V_R = 0$ , $f = 1MHz$		2	pF
Reverse Recovery Time	t <sub>rr</sub>	Irr = 0.1 X $I_R$ , $I_F = I_R = 10$ mA, $R_L = 100$ ohm		4.0	ns

1N4148WT Rev0 210511E

Customer Notes 1N4148WT

SOD-523 PLASTIC PCAKAGE

# PACKAGE SOD-523 FL



Cathode is marked by Band
All dimensions are in mm

#### **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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of

## Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119

email@cdil.com www.cdilsemi.com

1N4148WT Rev0 210511E