

#### **Features**

- · Halogen Free
- · AEC-Q101 Qualified
- · Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- · Epoxy Meets UL 94 V-0 Flammability Rating
- · Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

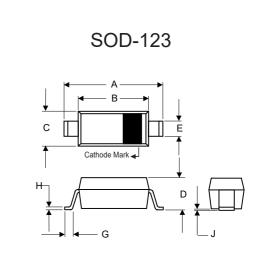
# 400mW High Speed Switching Diode

# **Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 312.5°C/W Junction To Ambient

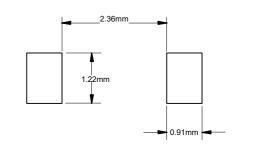
MCC Part Number	Device Marking
1N4148WHE3	T4

Parameter		Symbol	Value	
DC Reverse Voltage		$V_R$	100V	
Peak Repetitive Reverse Voltage		$V_{RRM}$	100V	
RMS Reverse Voltage		$V_{R(RMS)}$	71V	
Peak Forward Current		I <sub>FM</sub>	300mA	
Average Rectified Current		lo	150mA	
Peak Forward Surge Current	t=1s		1A	
Current	t=1µs	I <sub>FSM</sub>	2A	
Power Dissipation		P <sub>D</sub>	400mW	



DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.140	0.152	3.55	3.85	
В	0.100	0.112	2.55	2.85	
С	0.055	0.071	1.40	1.80	
D		0.053		1.35	
Е	0.018	0.026	0.45	0.65	
G	0.006		0.15		
Н		0.010		0.25	
J		0.006		0.15	

### Suggested Solder Pad Layout



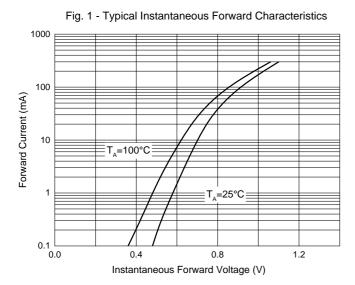


# Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
E I Weller	V <sub>F</sub>	I <sub>F</sub> =1mA			0.715	V
		I <sub>F</sub> =10mA			0.855	V
Forward Voltage		I <sub>F</sub> =50mA			1	V
	I <sub>F</sub> =150mA			1.25	V	
	V <sub>R</sub> =75V			1	μΑ	
Reverse Current	$I_R$	V <sub>R</sub> =20V			0.025	μA
		V <sub>R</sub> =75V, T <sub>J</sub> =150°C			50	μA
Total Capacitance	C <sub>T</sub>	$V_R = 0V$ , $f = 1MHz$			2	pF
Reverse Recovery Time	t <sub>rr</sub>	$I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1, R_L = 100 \Omega$			4	ns



## **Curve Characteristics**



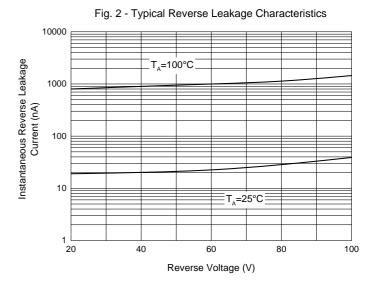


Fig. 3 - Power Derating Curve

500
400
400
100
0 25 50 75 100 125 150
Ambient Temperature (°C)



# **Ordering Information**

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

#### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp**. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp**, and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

#### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

单击下面可查看定价,库存,交付和生命周期等信息

>>MCC