



Micro Commercial Components 20736 Marilla Street Chatsworth

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### **MMBD4148**

### **Features**

- Low Current Leakage
- Halogen free available upon request by adding suffix "-HF" Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating

Moisture Sensitivity Level 1

. Pin Configuration Top View



Marking: KA2, A2

# **Maximum Ratings**

Operating Temperature: -55°C to +150°C

Storage Temperature: -55°C to +150°C

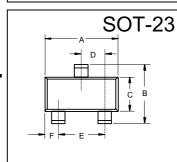
Maximum Thermal Resistance; 357K/W Junction To Ambient

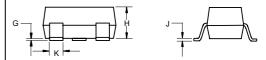
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Reverse Voltage	$V_R$	75V	
Peak Reverse	$V_{RM}$	100V	
Voltage			
Average Rectified	Ιο	150mA	Resistive Load
Current			f > 50Hz
Power Dissipation	P <sub>TOT</sub>	350mW	
Junction	$T_J$	150°C	
Temperature			
Peak Forward Surge	$I_{FSM}$	1A	t=1s,Non-Repetitive
Current			
Maximum			
Instantaneous	$V_{F}$	.855V	$I_{FM} = 10mA;$
Forward Voltage			T <sub>J</sub> = 25°C*
Maximum DC			
Reverse Current At	$I_R$	25nA	T <sub>J</sub> = 25°C
Rated DC Blocking			V <sub>R</sub> = 20 V
Voltage			
Typical Junction	C <sub>J</sub>	2pF	Measured at
Capacitance			1.0MHz, V <sub>R</sub> =0V
Reverse Recovery	T <sub>rr</sub>	4nS	I <sub>F</sub> =10mA
Time			$V_R = 6V$
			$R_L=100\Omega$

<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

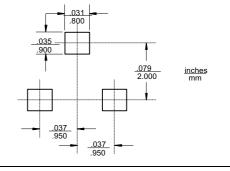
# 350mW 100 Volt Silicon Epitaxial Diode





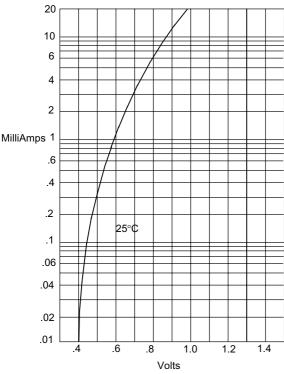
DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.110	.120	2.80	3.04		
В	.083	.104	2.10	2.64		
C	.047	.055	1.20	1.40		
D	.035	.041	.89	1.03		
Е	.070	.081	1.78	2.05		
F	.018	.024	.45	.60		
G	.0005	.0039	.013	.100		
Η	.035	.044	.89	1.12		
J	.003	.007	.085	.180		
K	.015	.020	.37	.51		

### Suggested Solder Pad Layout



## MMBD4148

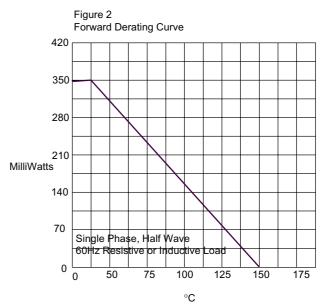
Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

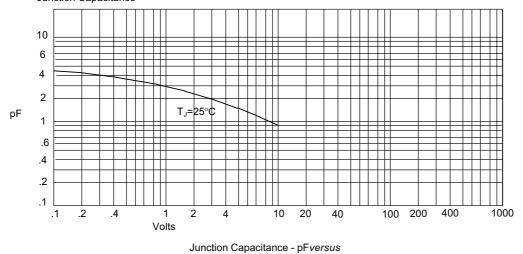
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Admissable Power Dissipation - MilliWattsversus Ambient Temperature -°C

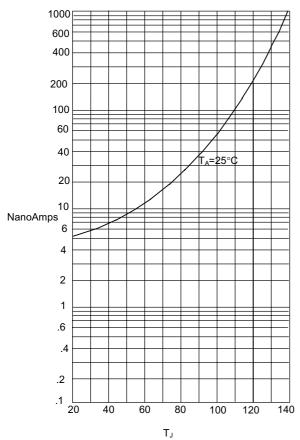
Figure 3
Junction Capacitance



Reverse Voltage - Volts

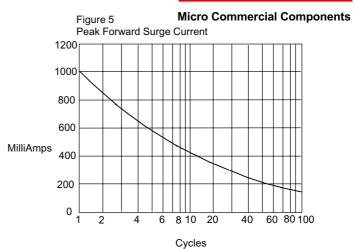
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Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - NanoAmpere ${\bf x}$ ersus Junction Temperature - °C





Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



### **Micro Commercial Components**

### **Ordering Information:**

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

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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