

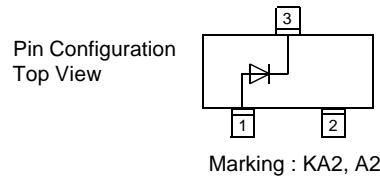


Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

Features

- Low Current Leakage
- Low Cost
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0



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

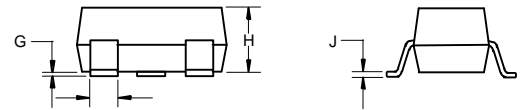
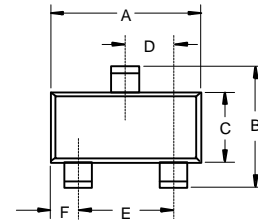
Reverse Voltage	V_R	75V	
Peak Reverse Voltage	V_{RM}	100V	
Average Rectified Current	I_O	150mA	Resistive Load $f > 50\text{Hz}$
Power Dissipation	P_{TOT}	350mW	
Junction Temperature	T_J	150°C	
Peak Forward Surge Current	I_{FSM}	1A	$t=1\text{s, Non-Repitive}$
Maximum Instantaneous Forward Voltage	V_F	.855V	$I_{FM} = 10\text{mA};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	25nA	$T_J = 25^\circ\text{C}$ $V_R = 20\text{V}$
Typical Junction Capacitance	C_J	2pF	Measured at 1.0MHz, $V_R=0\text{V}$
Reverse Recovery Time	T_{rr}	4nS	$I_F=10\text{mA}$ $V_R = 6\text{V}$ $R_L=100\Omega$

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

MMBD4148

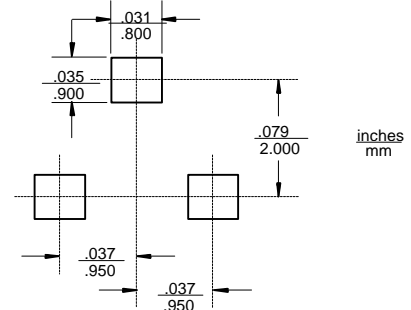
350mW 100 Volt Silicon Epitaxial Diode

SOT-23



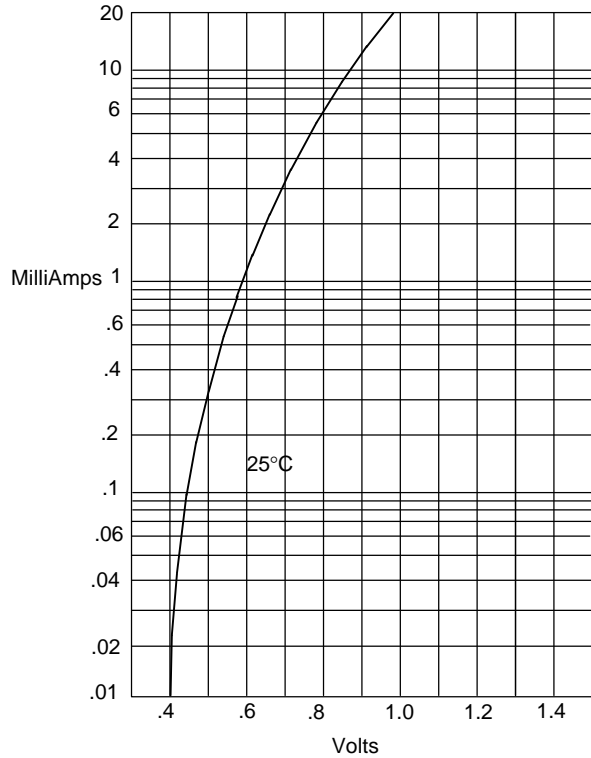
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



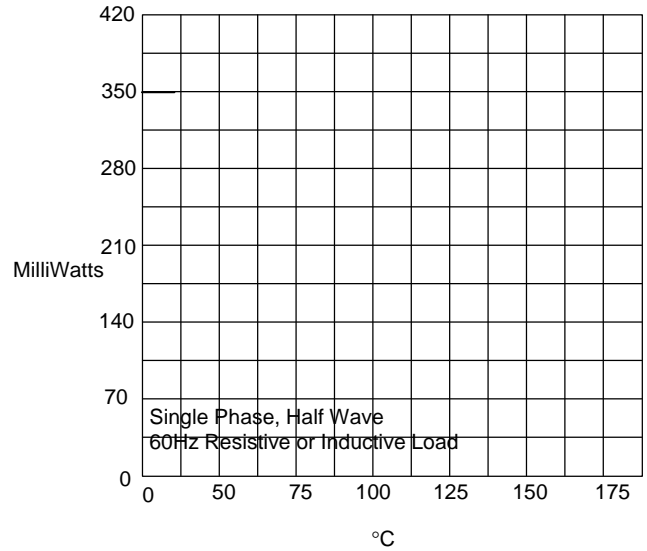
MMBD4148

Figure 1
Typical Forward Characteristics



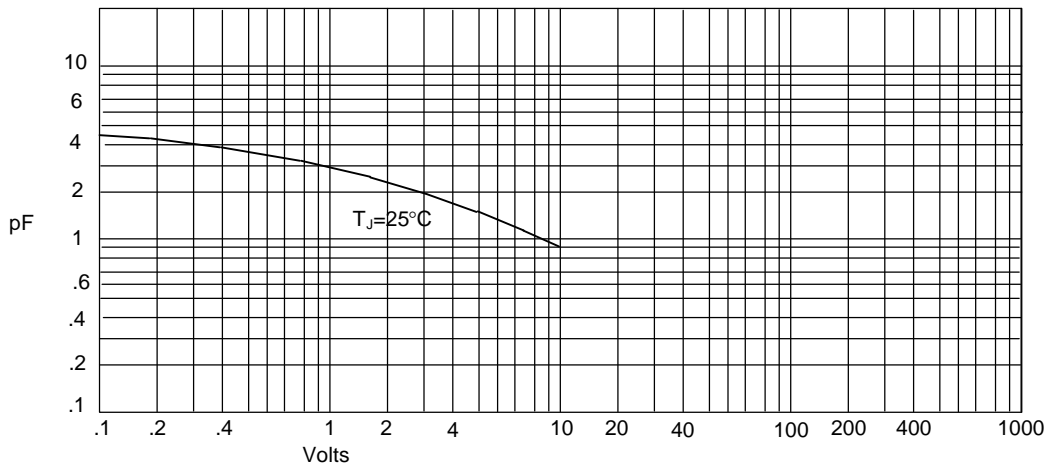
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Admissible Power Dissipation - MilliWatts *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



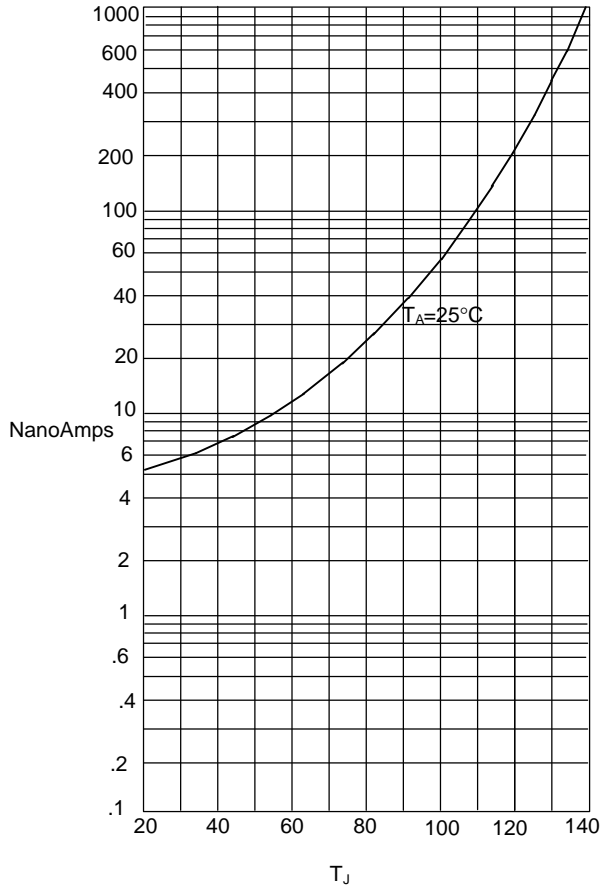
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

MMBD4148



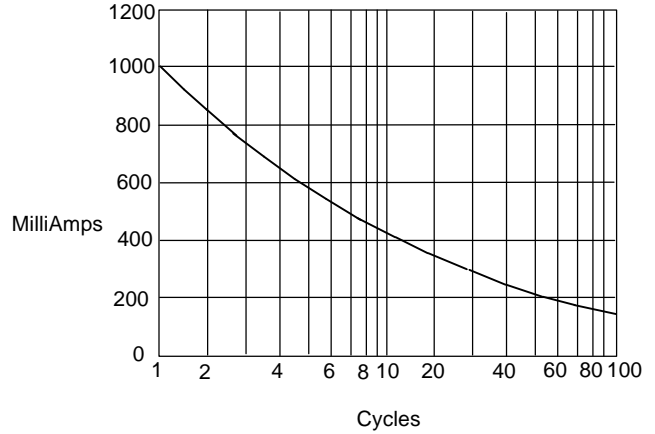
Micro Commercial Components

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - NanoAmperes versus Junction Temperature - °C

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles



Micro Commercial Components

*****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.

*****APPLICATIONS DISCLAIMER*****

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.