

Features

- Low Current Leakage
- Small Outline Surface Mount Package
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance:357°C/WJunction to Ambient

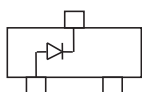
MCC Part Number	Device Marking	Peak Reverse Voltage V_{RM}	Reverse Voltage V_R
MMBD914	5D	100V	75V
Average Rectified Output Current	I_o	150mA	Resistive Load $f > 50\text{Hz}$
Peak Forward Surge Current	I_{FSM}	1.0A	$t=1\text{s, Non-Repertive}$
Power Dissipation	P_{TOT}	350mW	

Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Forward Voltage	V_F	0.855V	$I_{FM}=10\text{mA}, T_j=25^\circ\text{C} *$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	25nA	$V_R=20\text{V}, T_j=25^\circ\text{C}$
Typical Junction Capacitance	C_J	2pF	$V_R=0.0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	T_{rr}	4.0ns	$I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega$

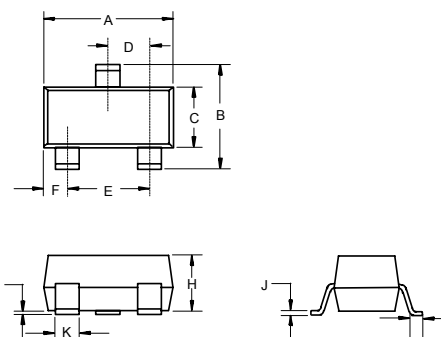
*Pulse test: Pulse width 300 μsec , Duty cycle 2%

Internal Structure



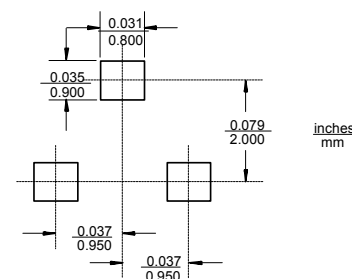
350mW 100 Volt Silicon Epitaxial Diode

SOT-23



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.014	0.020	0.35	0.51	
L	0.007	0.020	0.20	0.50	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

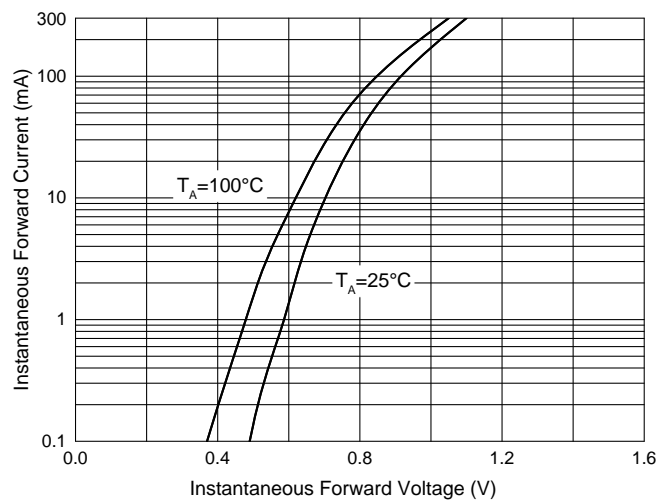


Fig. 2 - Typical Reverse Leakage Characteristics

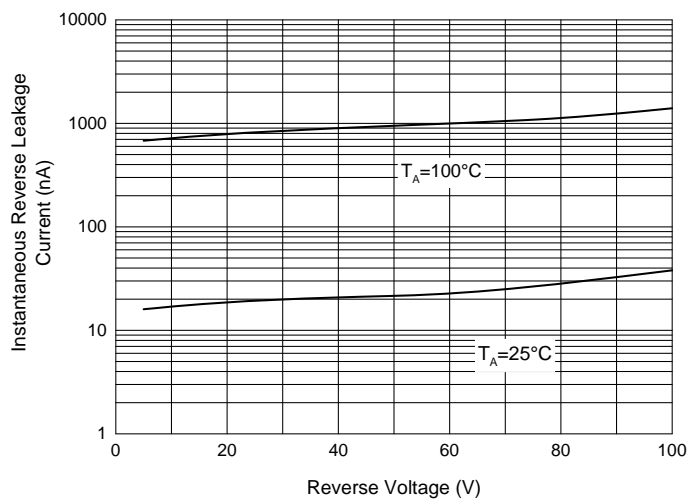
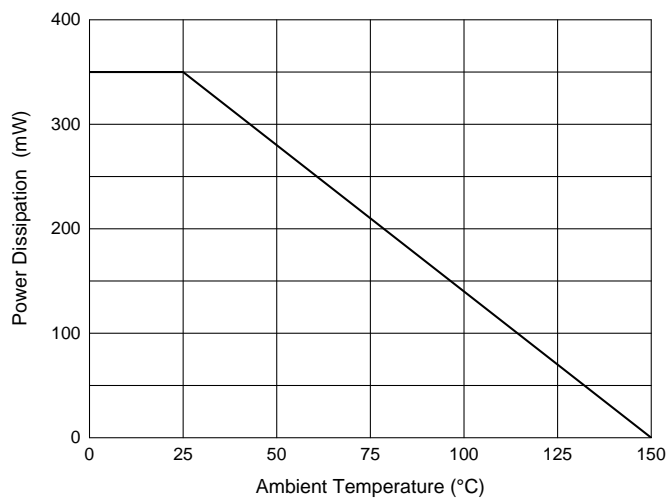


Fig. 3 - Power Derating Curve



Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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.