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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## **MMDL914**

### **Features**

- Fast Switching Speed
- Low Current Leakage
- **Compression Bond Construction**
- **Surface Mount Application**
- Device Marking: MMDL914 = 5D
- 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

## **Maximum Ratings**

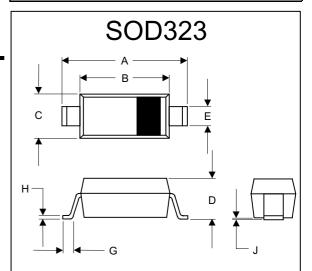
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 635°C/W Junction To Ambient

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

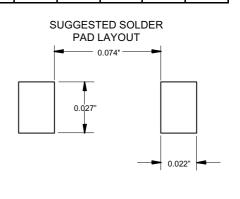
Reverse Voltage	$V_R$	100V	
Minimum Breakdown Voltage	$V_{(BR)}$	100V	I <sub>R</sub> = 100μA
Forward Current	I <sub>F</sub>	200mA	
Total Device Dissipation FR-5 Board Derate above 25°C	P <sub>D</sub>	200mW 1.57mW/°C	
Junction Temperature	T <sub>J</sub>	150°C	
Peak Forward Surge Current	I <sub>FSM</sub>	500mA	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V	I <sub>FM</sub> = 10mA; T <sub>J</sub> = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	25nA 0.5μA	$V_R$ =20Volts $V_R$ =75Volts $T_J$ = 25°C
Maximum Junction Capacitance	CJ	4pF	Measured at 1.0MHz, V <sub>R</sub> =0V
Maximum Reverse Recovery Time	T <sub>rr</sub>	4nS	$I_F=10\text{mA}$ $V_R=6V$ $R_L=100\Omega$

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

# **High Speed Switching Diode**



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX		
Α	.090	.107	2.30	2.70		
В	.063	.071	1.60	1.80		
С	.045	.053	1.15	1.35		
D	.031	.045	0.80	1.15		
Е	.010	.016	0.25	0.40		
G	.004	.018	0.10	0.45		
Н	.004	.010	0.10	0.25		
J		.006		0.15		

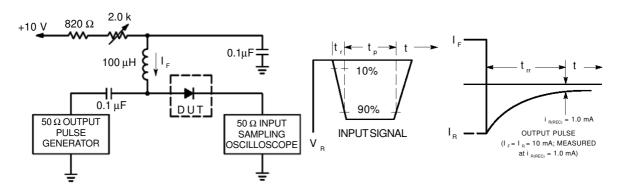


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## **MMDL914**

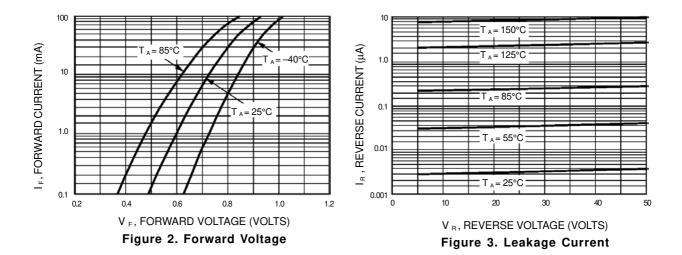




Notes: 1. A 2.0 k $\Omega$  variable resistor adjusted for a Forward Current (I  $_{\rm F}$ ) of 10mA.

- 2. Input pulse is adjusted so I  $_{\mbox{\scriptsize R(peak)}}$  is equal to 10mA.
- 3. t p » t rr

Figure 1. Recovery Time Equivalent Test Circuit



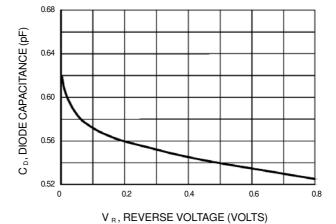


Figure 4. Capacitance

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#### **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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