

Features

- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	100	Vdc
Forward Current	I_F	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	500	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board (Note 1.) $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	225	mW
		1.8	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	$^\circ\text{C/W}$
Total Device Dissipation Alumina Substrate (Note 2.) $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	300	mW
		2.4	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Operating/Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Reverse Breakdown Voltage ($I_R = 100 \mu\text{Adc}$)	$V_{(BR)}$	100	—	Vdc
Reverse Voltage Leakage Current ($V_R = 20 \text{ Vdc}$) ($V_R = 75 \text{ Vdc}$)	I_R	—	25 5.0	nAdc μAdc
Diode Capacitance ($V_R = 0, f = 1.0 \text{ MHz}$)	C_T	—	4.0	pF
Forward Voltage ($I_F = 10 \text{ mAdc}$)	V_F	—	1.0	Vdc
Reverse Recovery Time ($I_F = I_R = 10 \text{ mAdc}$) (Figure 1)	t_{rr}	—	4.0	ns

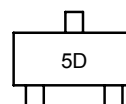
1. FR-5 = $1.0 \times 0.75 \times 0.062 \text{ in.}$
2. Alumina = $0.4 \times 0.3 \times 0.024 \text{ in.}$ 99.5% alumina.



SOT-23



MARKING DIAGRAM



5D = Device Code

ORDERING INFORMATION

Device	Package	Shipping
MMBD914LT1	SOT-23	3000/Tape & Reel

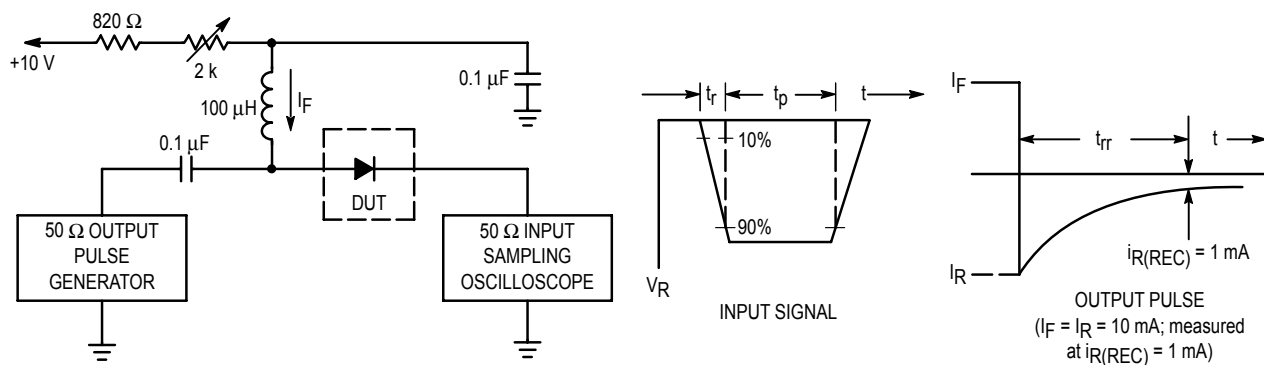


Figure 1. Recovery Time Equivalent Test Circuit

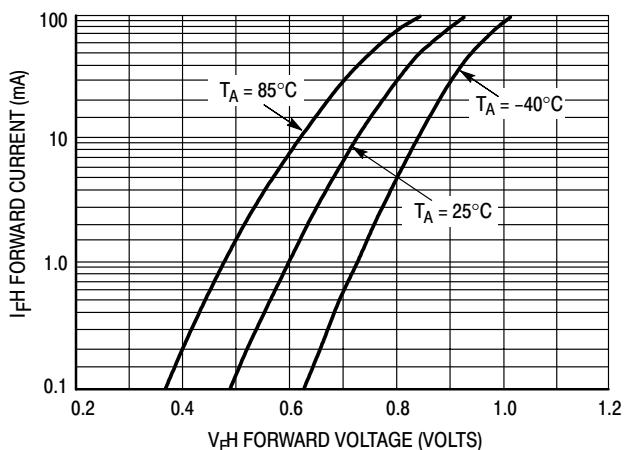


Figure 2. Forward Voltage

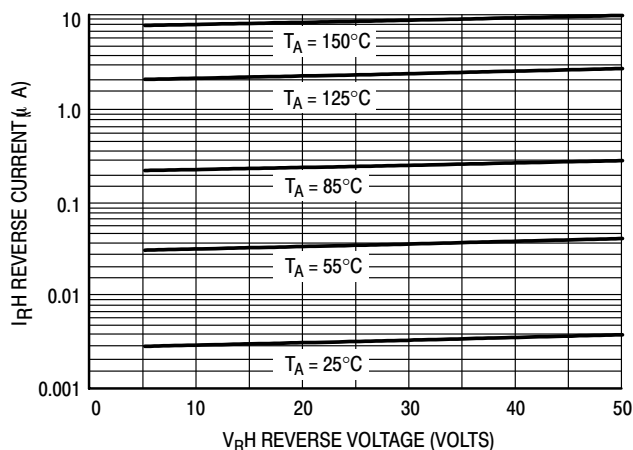


Figure 3. Leakage Current

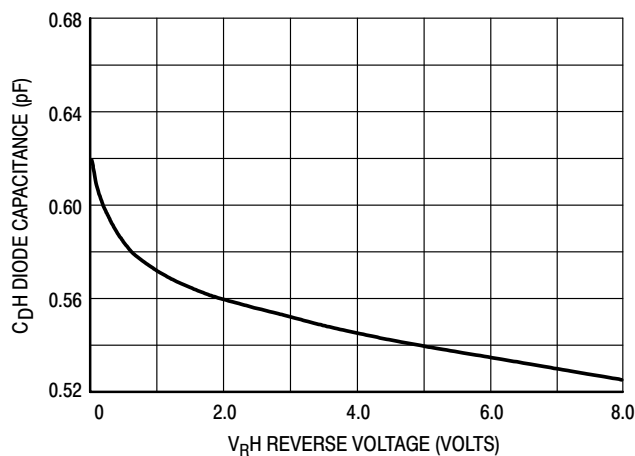
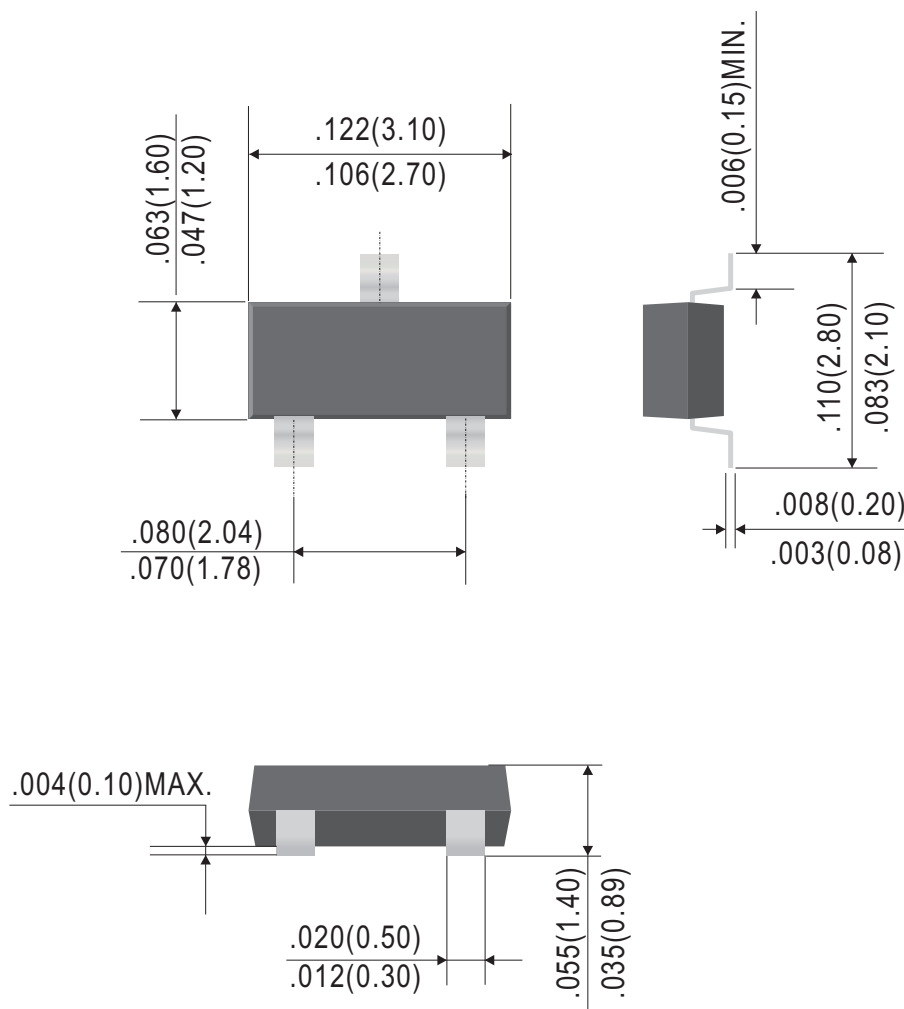


Figure 4. Capacitance

SOT-23



Dimensions in inches and (millimeters)

Ordering Information:

Device PN	Packing
MMBD914LT1 G ⁽¹⁾ -WS	Tape&Reel: 3 Kpcs/Reel

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