



MMBD914TG

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 200mWatts

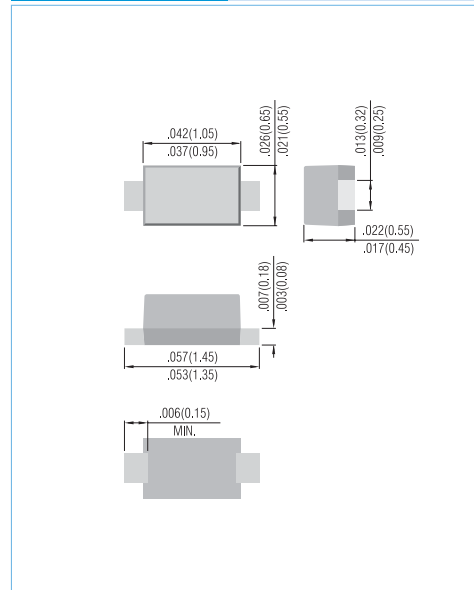
FEATURES

- Very Fast Reverse Recovery ($T_{rr} < 4.0$ ns typical)
- Low Capacitance (4pF@0V typical)
- Surface Mount Package Ideally Suited for Automatic insertion
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case : SOD-723, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0007gram
- Marking : BF

SOD-723 Unit: inch (mm)



ABSOLUTE RATINGS

PARAMETER	SYMBOL	LIMITS	UNITS
Maximum Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	0.2	A
Non-repetitive Peak Forward Surge Current at $t=0.001$ ms	I_{FSM}	4.0	A

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	LIMITS	UNITS
Power Dissipation (Note 1)	P_{TOT}	200	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	635	$^{\circ}C/W$
Operating Junction and Storage Temperature Rang	T_J, T_{STG}	-55 to 150	$^{\circ}C$

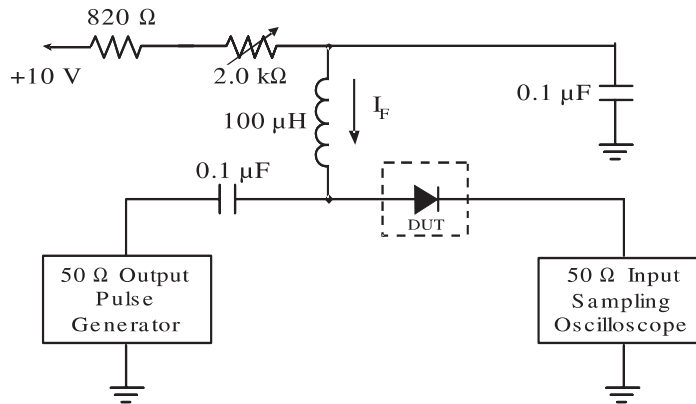
Note 1.FR-4 Board = 70 x 60 x 1mm.



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ELECTRICAL CHARACTERISTICS (T_J = 25°C, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Reverse Breakdown Voltage	V _(BR)	I _R = 100μA	100	-	-	V
Reverse Current	I _R	V _R = 20V V _R = 75V	-	-	0.025 5.0	μA
Forward Voltage	V _F	I _F = 10mA	-	-	1.0	V
Total Capacitance	C _T	V _R = 0V, f = 1MHz	-	-	4.0	pF
Reverse Recovery Time (Figure 1)	T _{RR}	I _F = I _R = 10mA, R _L = 100Ω	-	-	4.0	ns



- Notes: 1. A 2.0kΩ variable resistor adjusted for a forward current (I_F) to 10mA
2. Input pulse is adjusted to I_{R(peak)} is equal to 10mA

Figure 1. REVERSE RECOVERY TIME EQUIVALENT TEST CIRCUIT



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ELECTRICAL CHARACTERISTICS CURVE

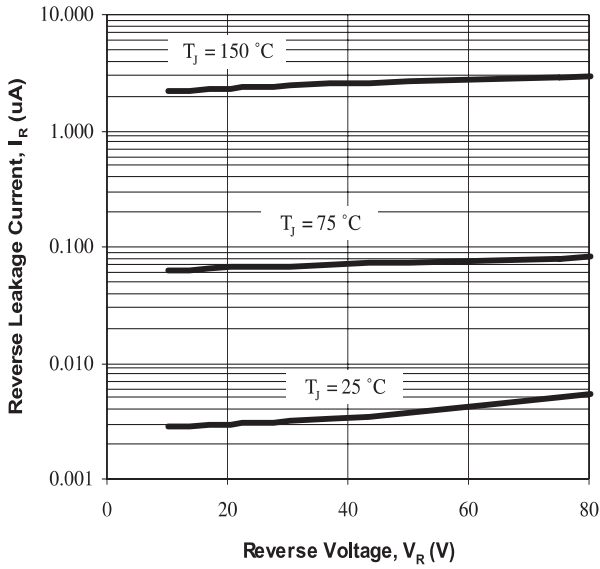


Fig. 1. Reverse Current vs. Reverse Voltage

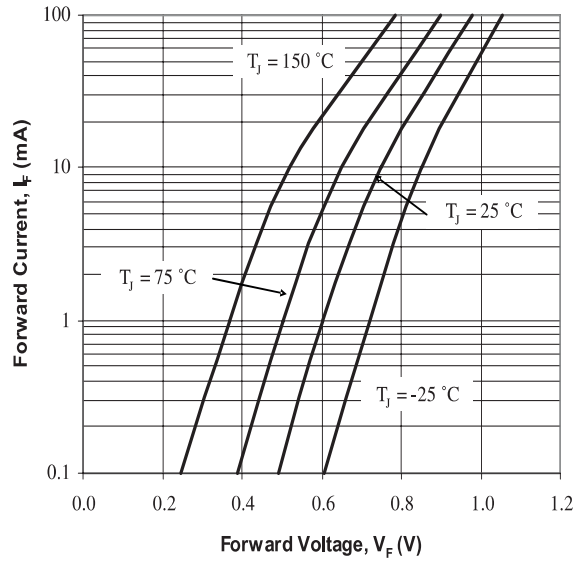


Fig. 2. Forward Current vs. Forward Voltage

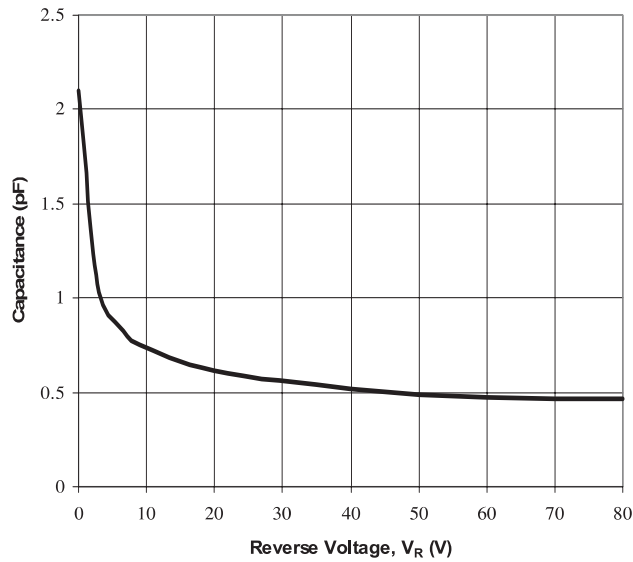
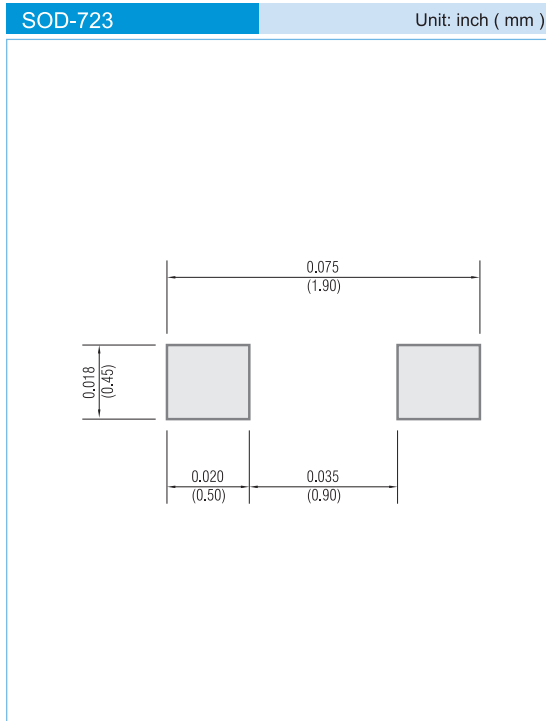


Fig. 3. Capacitance vs. Reverse Voltage



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information

T/R - 8K per 7" plastic Reel

LEGAL STATEMENT

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