



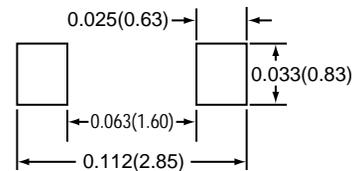
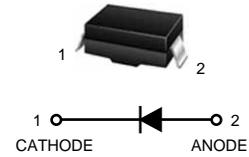
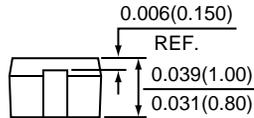
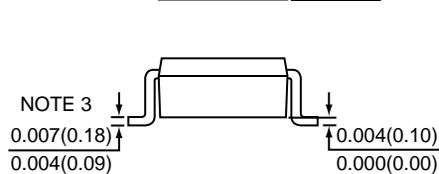
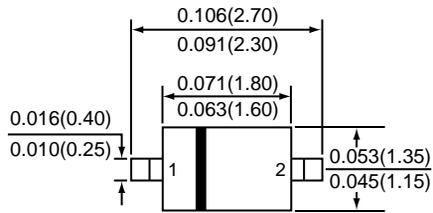
MMDL6050T1

SURFACE MOUNT SWITCHING DIODE

Reverse Breakdown Voltage - 70 Volts

Peak Forward Current - 200mA

SOD-323



Device Marking : MMDL6050T1 = 5A

*Dimensions in inches and (millimeters)

- NOTES: 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: MILLIMETERS.
 3. LEAD THICKNESS SPECIFIED PER L/F DRAWING WITH SOLDER PLATING.

MAXIMUM RATINGS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	VALUE	UNITS
Continuous Reverse Voltage	V_R	75	Vdc
Peak Forward Current	I_F	200	mAdc
Peak Forward Surge Current	I_{FSM}	500	mAdc

THERMAL CHARACTERISTICS

CHARACTERISTIC	SYMBOLS	MAX.	UNITS
Total Device Dissipation FR-5 Board, $T_A=25^\circ\text{C}$	P_D	200	mW
Derate above 25 °C		1.57	mW / °C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	°C / W
Junction and Storage Temperature	T_J, T_{STG}	150	°C

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

CHARACTERISTIC	SYMBOLS	MIN.	MAX.	UNITS
Reverse Breakdown Voltage ($I_{BR}=100\mu\text{A}$)	$V_{(BR)}$	70	-	Vdc
Reverse Voltage Leakage Current ($V_R=50\text{Vdc}$)	I_R	-	0.1	μAdc
Forward Voltage ($I_F=1.0\text{mAdc}$) ($I_F=100\text{mAdc}$)	V_F	0.55 0.85	0.7 1.1	Vdc
Junction Capacitance ($V_R=0\text{V}$, $f = 1.0\text{MHz}$)	C_J	-	2.5	pF
Reverse Recovery Time ($I_F=I_R=10\text{mAdc}$, $I_R(\text{REC}) = 1.0\text{mAdc}$)	t_{rr}	-	4.0	nS

RATINGS AND CHARACTERISTIC CURVES OF MMDL6050T1

FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT

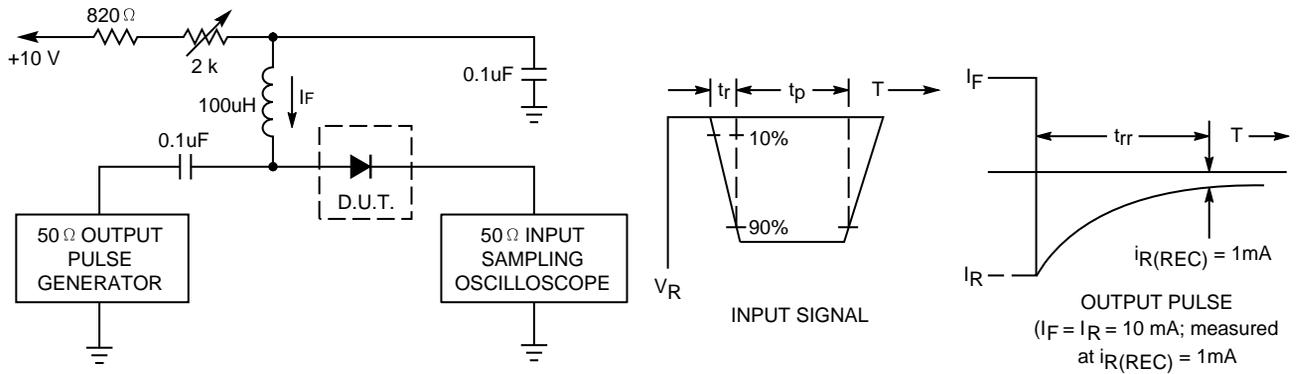


FIGURE 2. FORWARD VOLTAGE

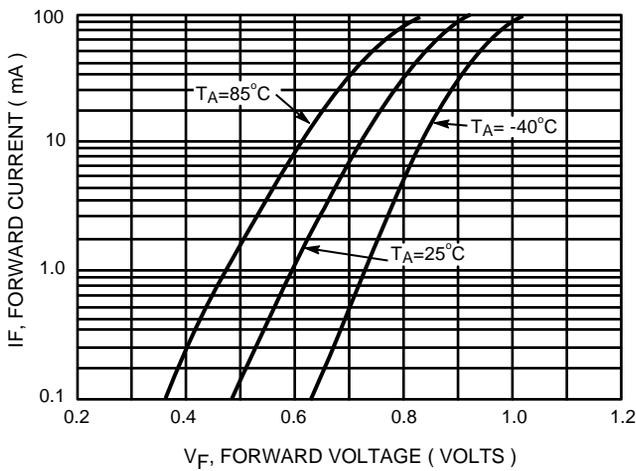


FIGURE 3. LEAKAGE CURRENT

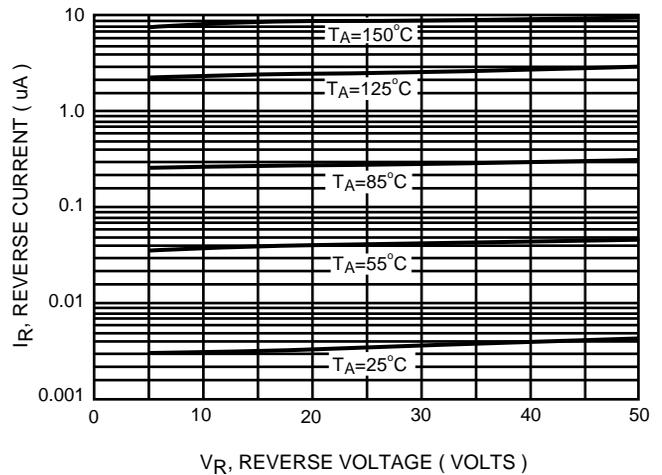


FIGURE 4. CAPACITANCE

