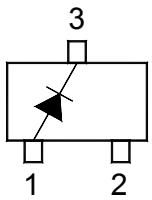
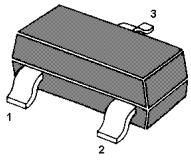
MMBD6050

SWITCHING DIODE





1. Anode 3. Cathode

Marking Code: **HD**
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Forward Current	I_F	200	mA
Peak Forward Surge Current	$I_{FM(surge)}$	500	mA
Total Device Dissipation FR-5 Board [1] T_A=25 °C Derate above 25 °C	P_D	225 1.8	mW mW/°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	°C/W
Total Device Dissipation Alumina Substrate [2] T_A=25 °C Derate above 25 °C	P_D	300 2.4	mW mW/°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	°C/W
Junction and Storage Temperature Range	T_J , T_S	-55 to +150	°C

[1] FR-5=1 x 0.75 x 0.062 in.
[2] Alumina=0.4 x 0.3 x 0.024 in. 99.5% alumina.

Characteristics at T_j = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I_F = 1 mA at I_F = 100 mA	 V_F V_F	 0.55 0.85	 0.7 1.1	 V V
Reverse Breakdown Voltage at $I_{(BR)}$ = 100 µA	$V_{(BR)}$	70	-	V
Reverse Voltage Leakage Current at V_R = 50 V	I_R	-	0.1	µA
Reverse Recovery Time at I_F = I_R = 10 mA, $I_{R(REC)}$ = 1 mA	t_{rr}	-	4	ns
Capacitance at V_R = 0 V	C	-	2.5	pF