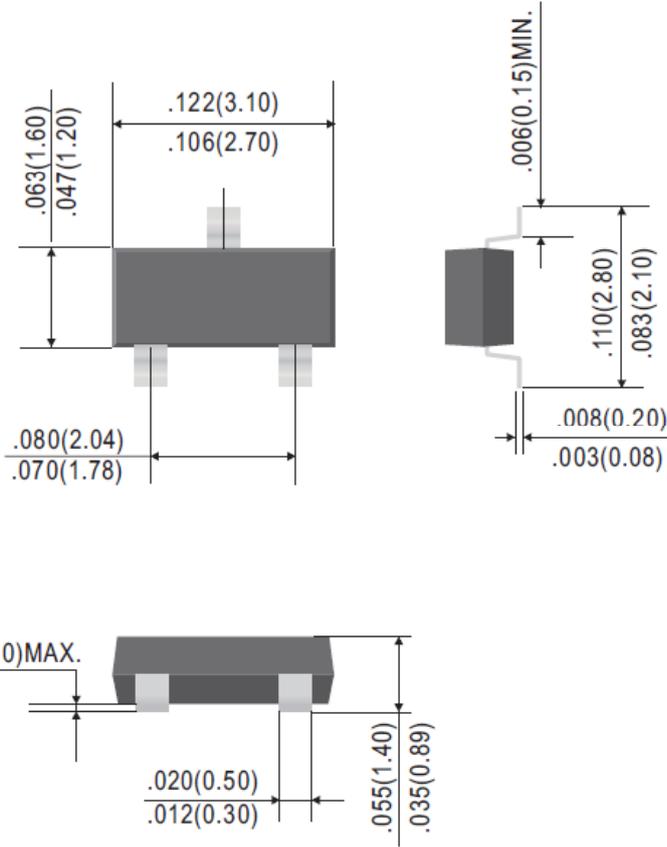




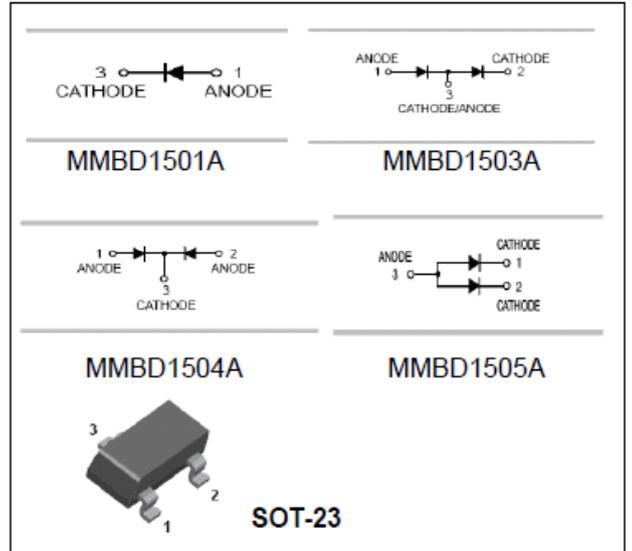
MMBD1501A~MMBD1505A



High Conductance Low Leakage Diode



Dimensions in inches and (millimeters)



FEATURES

- Two element incorporated into one package. (Emitter-coupled transistors)
- Reduction of the mounting area and assembly cost by one half.
- For general application
- Pb-Free package is available
- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1

MARKING:	MMBD1501A	A11
	MMBD1503A	A13
	MMBD1504A	A14
	MMBD1505A	A15



MMBD1501A~MMBD1505A



High Conductance Low Leakage Diode

Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified)				
Characteristic	Symbol	Value	Unit	
Reverse Voltage	V_R	200	V	
Average Rectified Current	$V_{F(AV)}$	200	mA	
Forward Continuous Current	I_{FM}	700	mA	
Peak Forward Current	I_{FSM}	@ $t=1.0\mu\text{s}$	1	A
		@ $t=1.0\text{s}$	2	
Power Dissipation	P_D	350	mW	
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$	
Operating/ Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^\circ\text{C}$	

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)						
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=5\mu\text{A}$	200	—	—	V
Forward Voltage	V_F	$I_F=1\text{mA}$	—	—	0.75	V
		$I_F=10\text{mA}$	—	—	0.85	
		$I_F=50\text{mA}$	—	—	0.95	
		$I_F=100\text{mA}$	—	—	1.1	
		$I_F=200\text{mA}$	—	—	1.3	
		$I_F=300\text{mA}$	—	—	1.5	
Reverse Current	I_R	$V_R=125\text{V}$	—	—	1	nA
		$V_R=180\text{V}$	—	—	10	
Total Capacitance	C_T	$V_R=0\text{V}, f=1.0\text{MHZ}$	—	—	4	pF



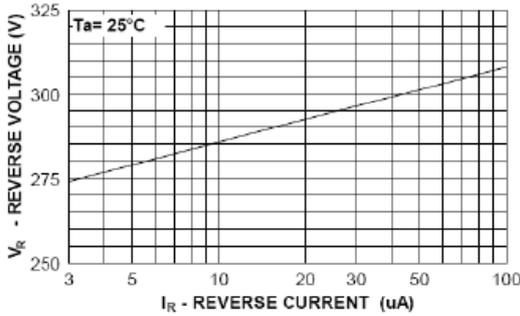
MMBD1501A~MMBD1505A



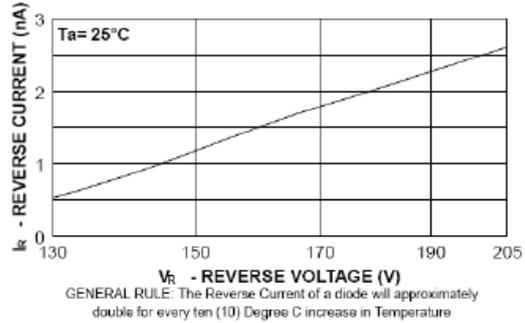
High Conductance Low Leakage Diode

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

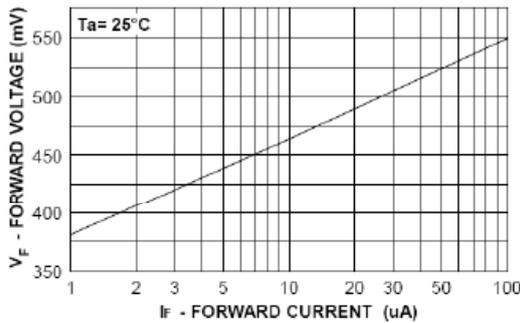
REVERSE VOLTAGE vs REVERSE CURRENT
BV - 3.0 to 100 μA



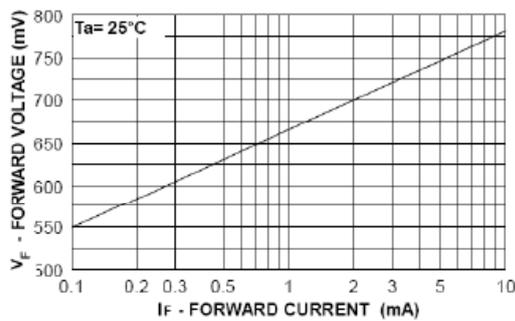
REVERSE CURRENT vs REVERSE VOLTAGE
IR - 130 - 205 Volts



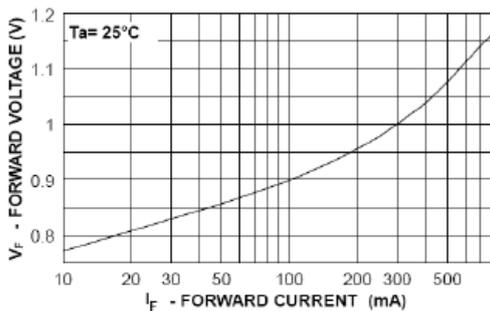
FORWARD VOLTAGE vs FORWARD CURRENT
VF - 1 to 100 μA



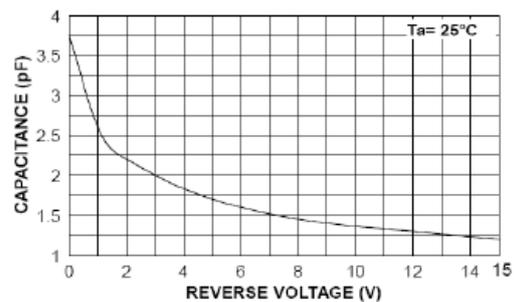
FORWARD VOLTAGE vs FORWARD CURRENT
VF - 0.1 to 10 mA



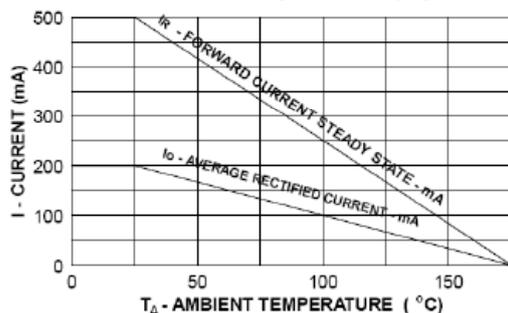
FORWARD VOLTAGE vs FORWARD CURRENT
VF - 10 to 800 mA



CAPACITANCE vs REVERSE VOLTAGE
VR - 0 to 15 V



Average Rectified Current (I_o) & Forward Current (I_f) versus Ambient Temperature (T_A)



POWER DERATING CURVE

