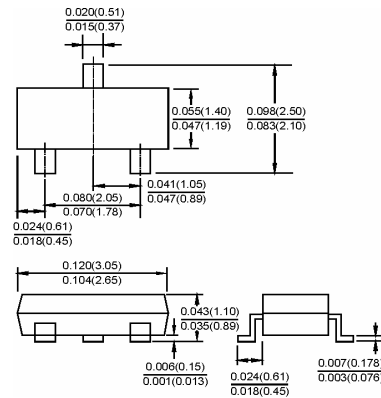


### SOT-23



### Features

- Two element incorporated into one package. (Emitter-coupled transistors)
- Reduction of the mounting area and assembly cost by one half.

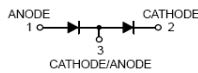
### Applications

- For general application.

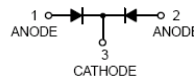
Dimensions in inches and (millimeters)



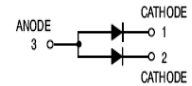
MMBD1501A



MMBD1503A



MMBD1504A



MMBD1505A

### Ordering Information

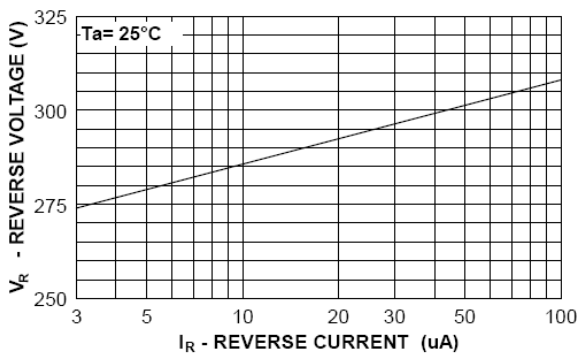
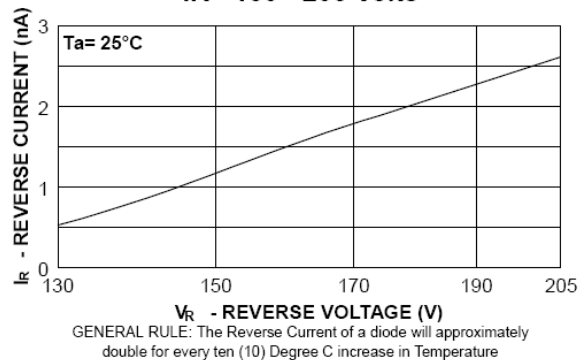
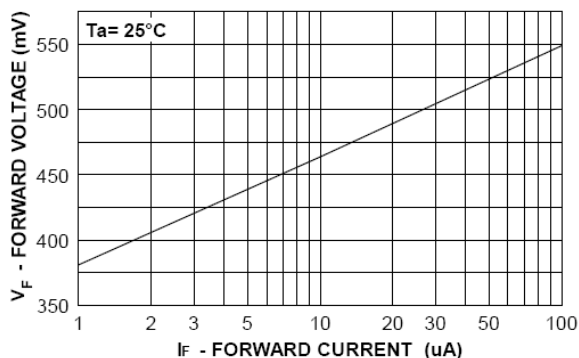
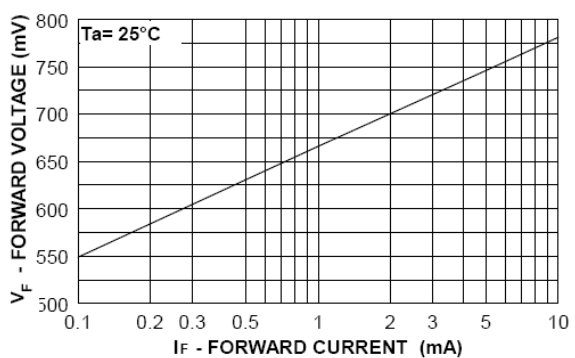
Type No.	Marking	Package Code
MMBD1501A	A11	SOT-23
MMBD1503A	A13	SOT-23
MMBD1504A	A14	SOT-23
MMBD1505A	A15	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

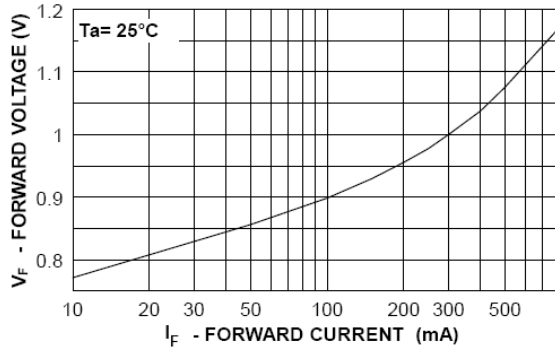
Parameter	Symbol	Limits	Unit
Reverse Voltage	$V_R$	200	V
Average rectified current	$V_{F(AV)}$	200	mA
Forward Continuous Current	$I_{FM}$	600	mA
Peak forward current (1.0s) (1.0m)	$I_{FSM}$	1.0 2.0	A
Power Dissipation	$P_d$	350	mW
Thermal resistance, Junction to ambient	$R_{\theta JA}$	357	°C/W
Storage temperature	$T_{STG}$	-55-150	°C

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

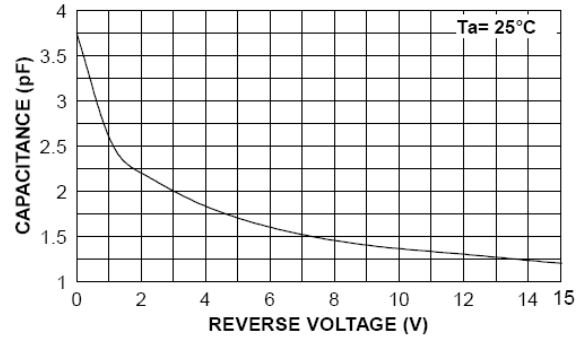
Parameter	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R1}$	200		V	$I_R=5\mu A$
Forward voltage	$V_F$	0.62	0.72	V	$I_F=1mA$
		0.72	0.83		$I_F=10mA$
		0.8	0.89		$I_F=50mA$
		0.83	0.93		$I_F=100mA$
		0.87	1.1		$I_F=200mA$
		0.9	1.15		$I_F=300mA$
Reverse current	$I_R$		1.0 10	nA	$V_R=125V$ $V_R=180V$
Diode Capacitance	$C_D$		4	pF	$V_R=0V, f=1MHz$

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**
**REVERSE VOLTAGE vs REVERSE CURRENT**  
**BV - 3.0 to 100 uA**

**REVERSE CURRENT vs REVERSE VOLTAGE**  
**IR - 130 - 205 Volts**

**FORWARD VOLTAGE vs FORWARD CURRENT**  
**VF - 1 to 100 uA**

**FORWARD VOLTAGE vs FORWARD CURRENT**  
**VF - 0.1 to 10 mA**


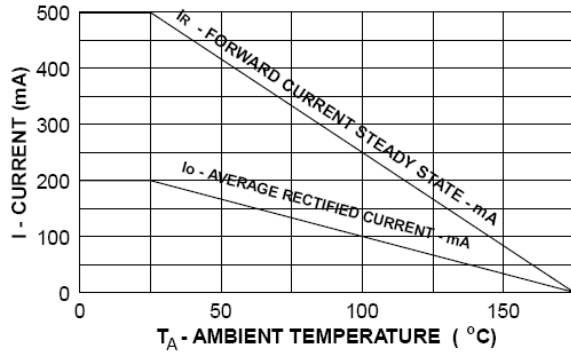
**FORWARD VOLTAGE vs FORWARD CURRENT**  
VF - 10 to 800 mA



**CAPACITANCE vs REVERSE VOLTAGE**  
VR - 0 to 15 V



**Average Rectified Current (Io) & Forward Current (IF) versus Ambient Temperature (TA)**



**POWER DERATING CURVE**

