

● FEATURES

Two element incorporated into one package.



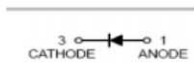
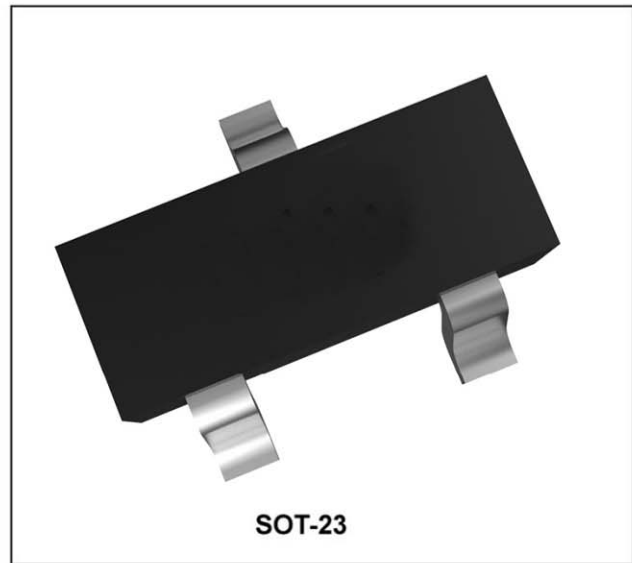
Lead-free

(Emitter-coupled transistors)

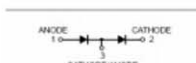
Reduction of the mounting area and assembly cost by one half.

● APPLICATIONS

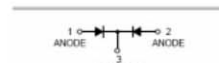
For general application.



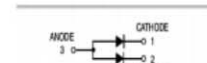
MMBD1501A



MMBD1503A



MMBD1504A



MMBD1505A

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

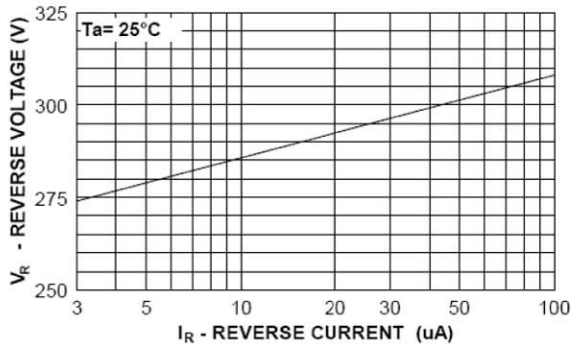
Parameter	Symbol	Limits	Unit
Reverse Voltage	V_R	200	V
Forward Continuous Current	I_F	200	mA
Power Dissipation	P_d	350	mW
Storage temperature	T_{STG}	-55-150	°C

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

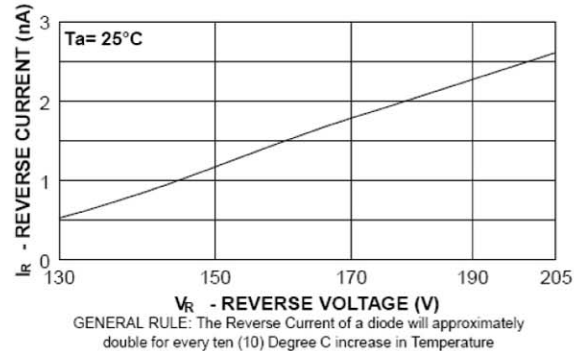
Parameter	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R1}$	200		V	$I_R=5\mu A$
Forward voltage	V_F	0.62	0.72	V	$I_F=1mA$
		0.72	0.83		$I_F=10mA$
		0.8	0.95		$I_F=50mA$
		0.82	1.1		$I_F=100mA$
		0.87	1.3		$I_F=200mA$
		0.9	1.5		$I_F=300mA$
Reverse current	I_R		10	nA	$V_R=180V$
Diode Capacitance	C_D		4	pF	$V_R=0V, f=1MHz$

● TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

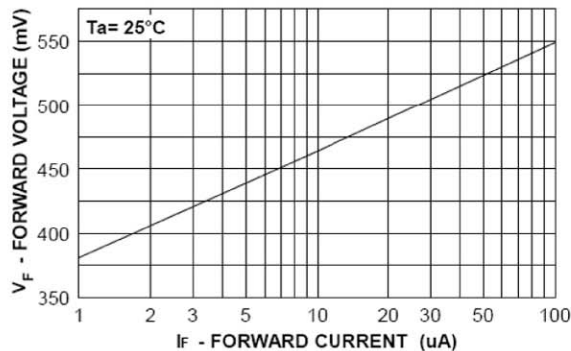
REVERSE VOLTAGE vs REVERSE CURRENT
BV - 3.0 to 100 μA



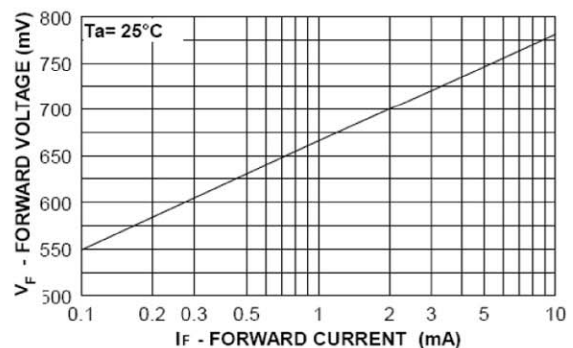
REVERSE CURRENT vs REVERSE VOLTAGE
IR - 130 - 205 Volts



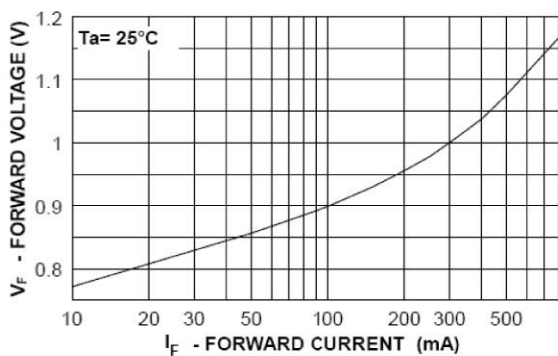
FORWARD VOLTAGE vs FORWARD CURRENT
VF - 1 to 100 μA



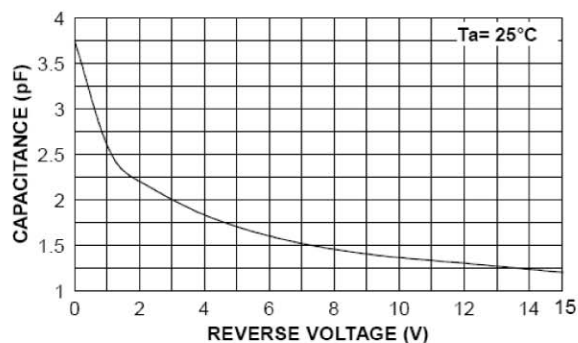
FORWARD VOLTAGE vs FORWARD CURRENT
VF - 0.1 to 10 mA



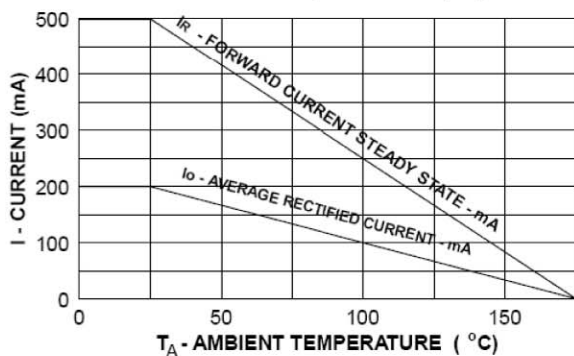
FORWARD VOLTAGE vs FORWARD CURRENT
VF - 10 to 800 mA



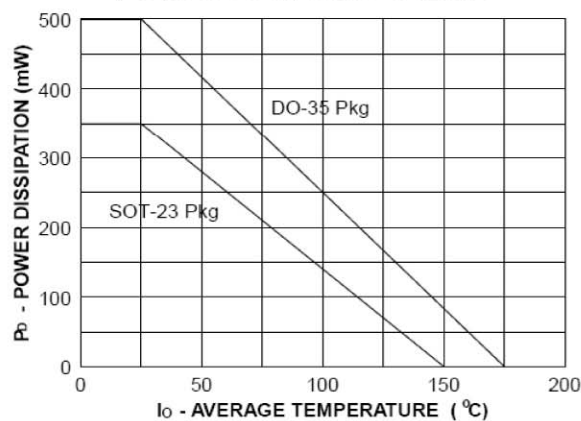
CAPACITANCE vs REVERSE VOLTAGE
VR - 0 to 15 V



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



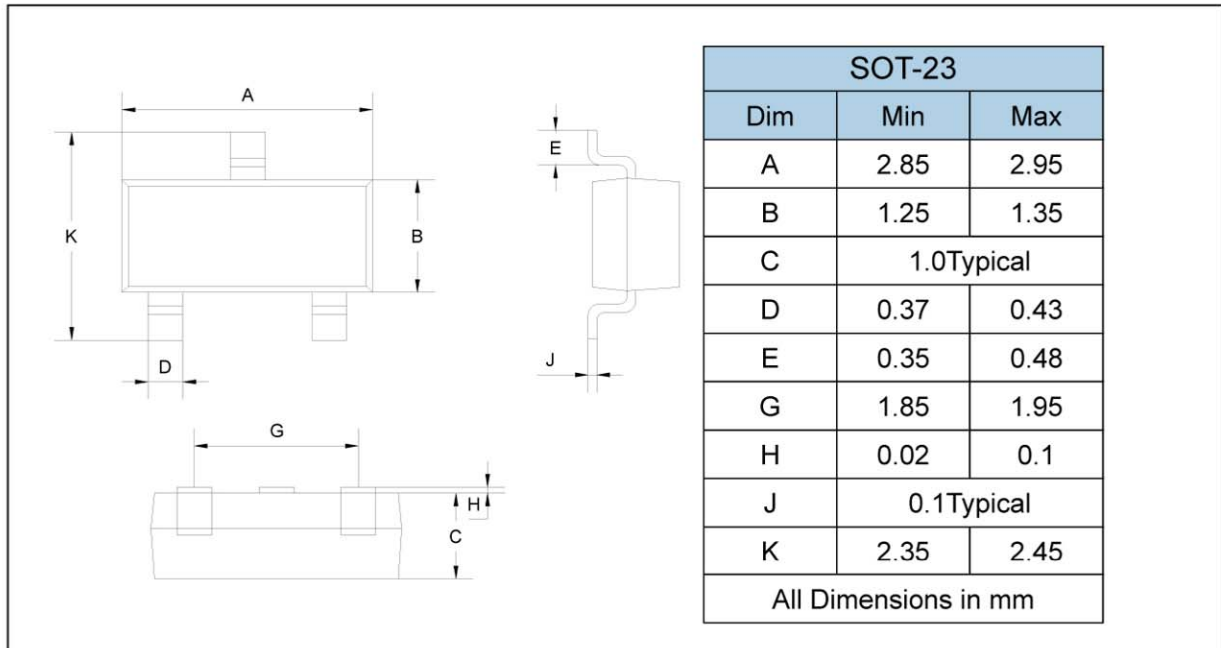
POWER DERATING CURVE



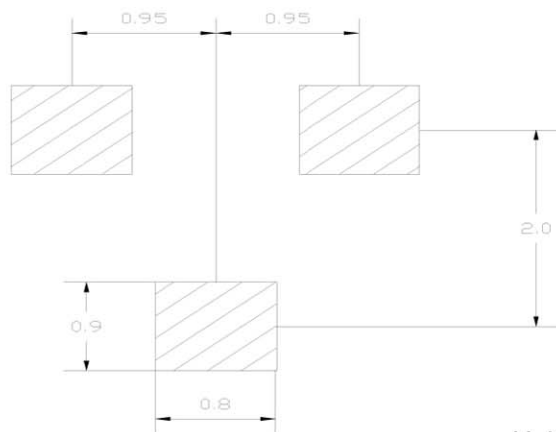
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBD1501A/1503A/1504A/1505A	SOT-23	3000/Tape&Reel