

SOD-123 Plastic-Encapsulate Diodes

MBR0560/MBR0580 Schottky Barrier Diode

FEATURES

- ⌘ Lead Free Finish/RoHS Compliant
- ⌘ Extremely Low Thermal Resistance
- ⌘ For Surface Mount Application and High Current Capability

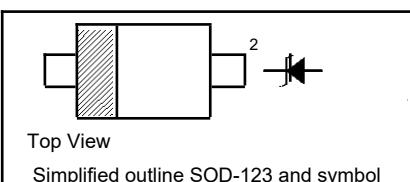
MARKING:

MBR0560:R6

MBR0580:R8

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



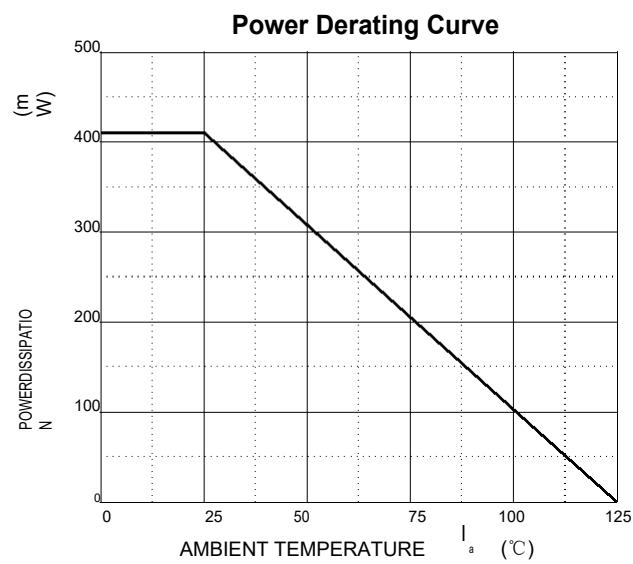
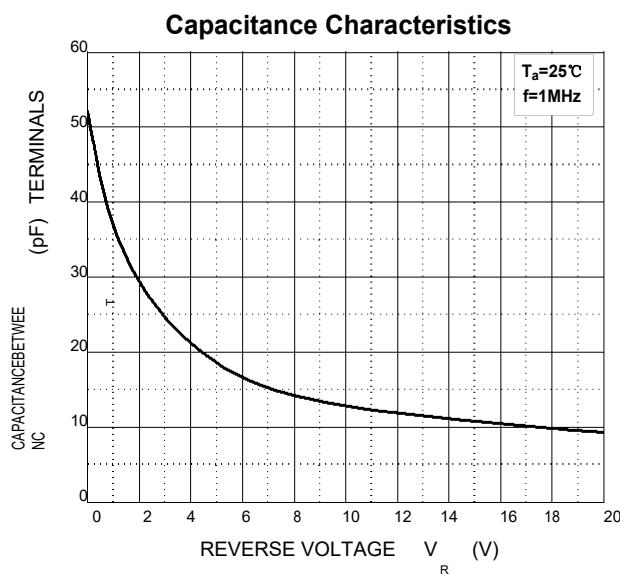
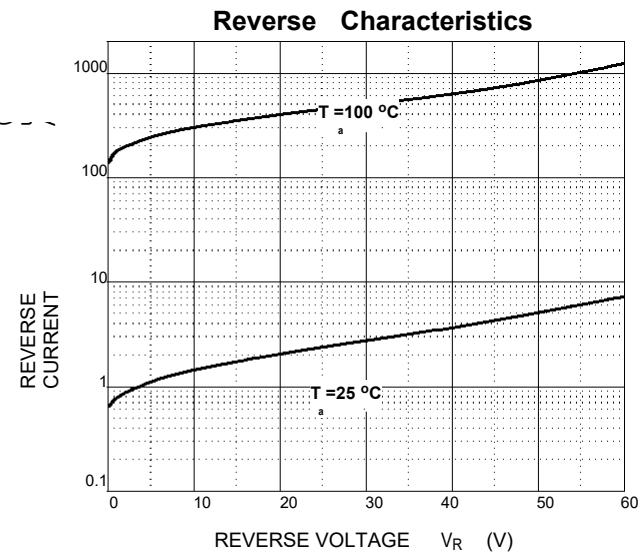
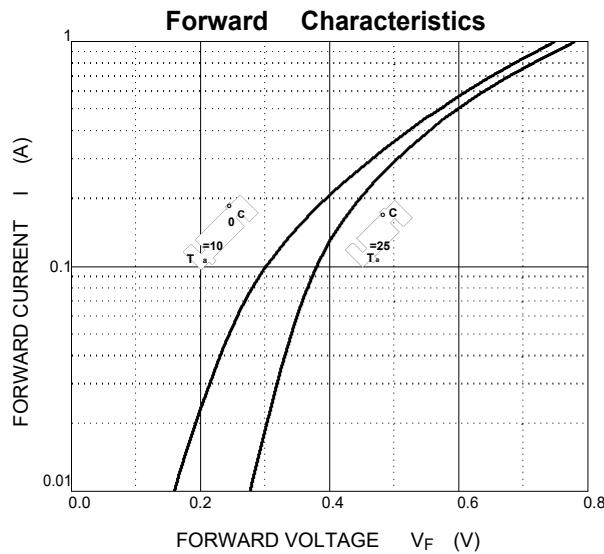
Maximum Ratings @ $T_a=25^\circ\text{C}$

Parameter	Symbol	MBR 0560	MBR 0580	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	60	80	
Maximum RMS voltage	V_{RMS}	42	56	V
Mean rectifying current	I_o	0.5		A
Non-repetitive Peak forward surge current $@t=8.3\text{ms}$	I_{FSM}	5.5		A
Power Dissipation	P_D	410		mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	244		$^\circ\text{C}/\text{W}$
Junction temperature	T_j	125		$^\circ\text{C}$
Storage temperature	T_{stg}	-55~+150		$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS $aT = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage						
MBR0560	V_F			0.70	V	$F=500\text{mA}$
MBR0580				0.80		
Reverse current						
MBR0560	I_R			80	μA	$V_R=60\text{V}$
MBR0580						$V_R=80\text{V}$
Capacitance between terminals	C_T		30		pF	$V_R=4\text{V}, f=1\text{MHz}$

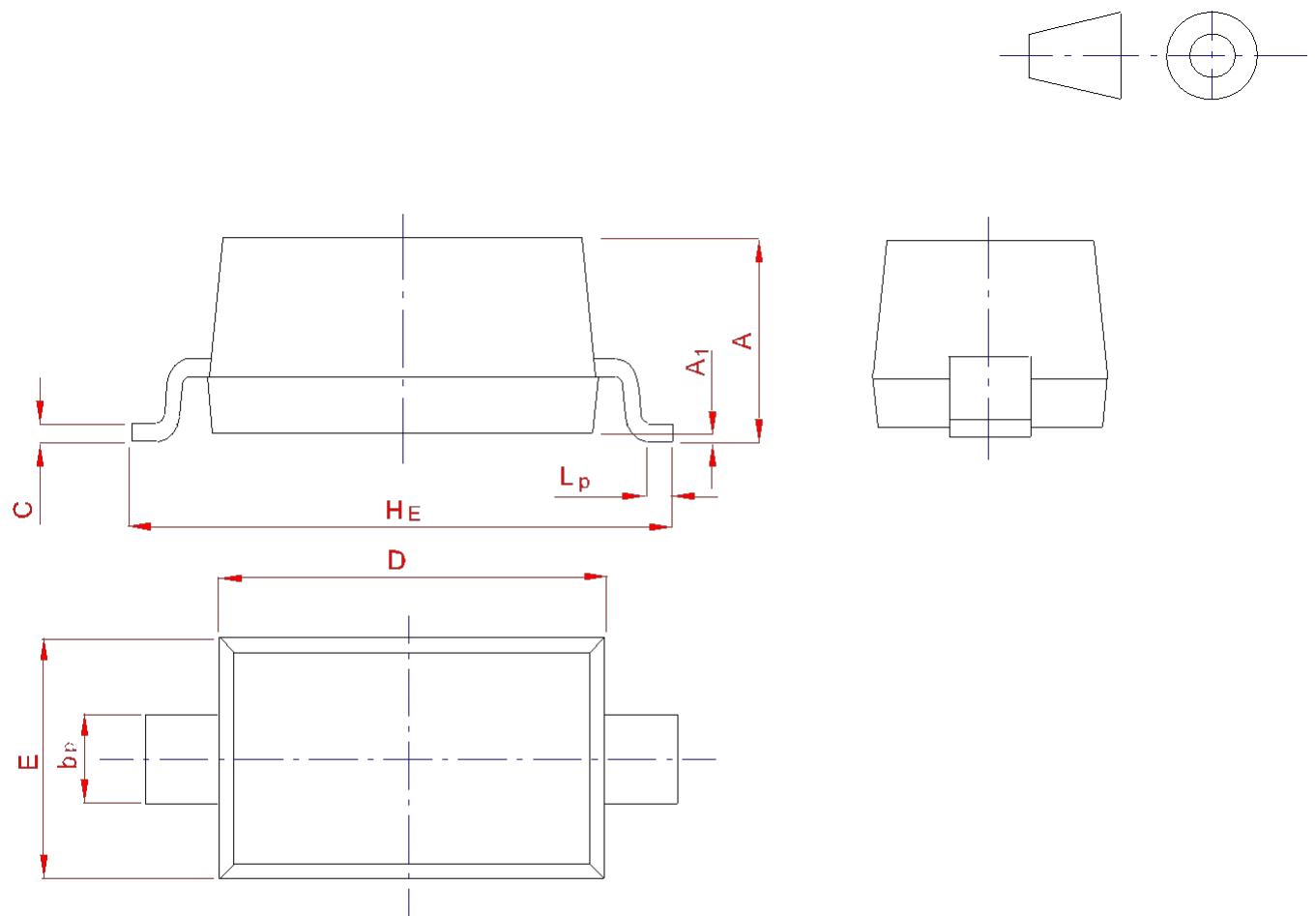
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20