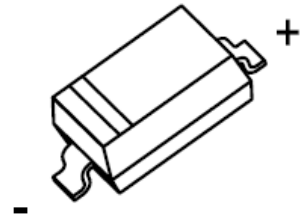


## Features

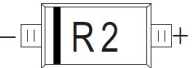
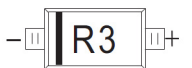
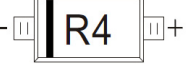
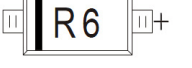
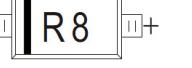
- Lead Free Finish/RoHS Compliant
- Extremely Low Thermal Resistance
- For Surface Mount Application and High Current Capability



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## Marking

SPMBR0520:R2	SPMBR0530:R3	SPMBR0540:R4	SPMBR0560:R6	SPMBR0580:R8
				

The marking bar indicates the cathode

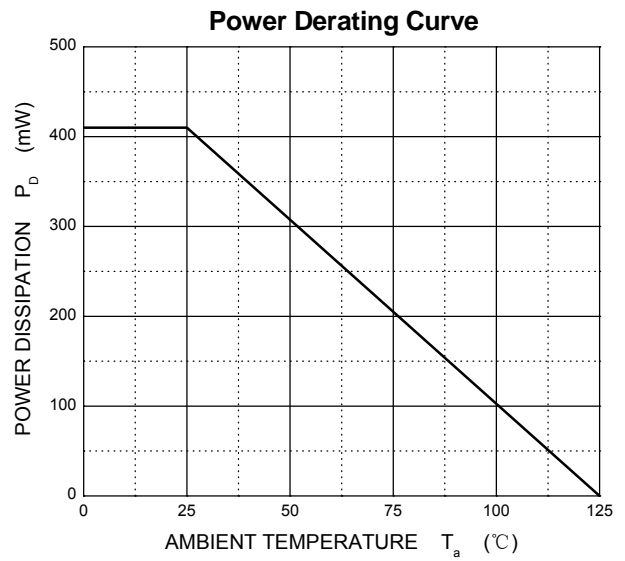
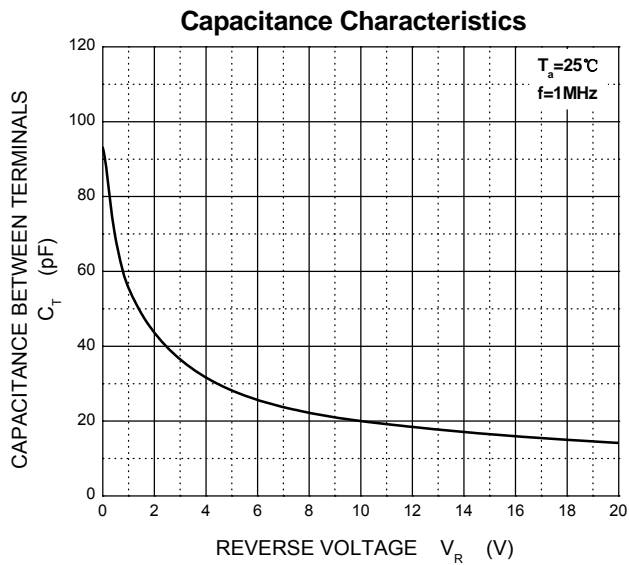
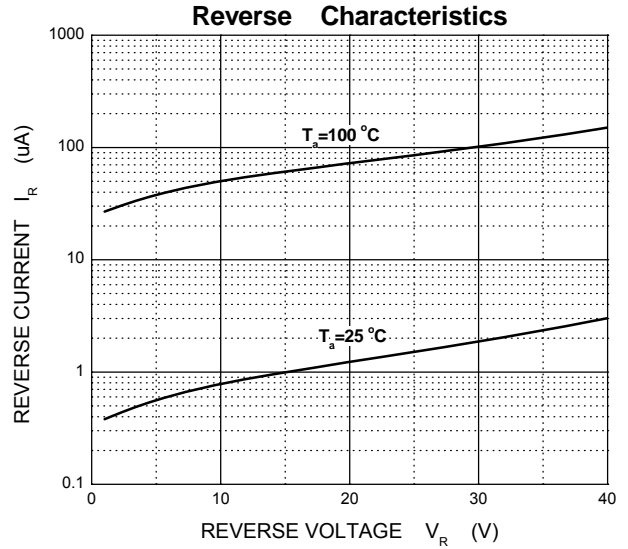
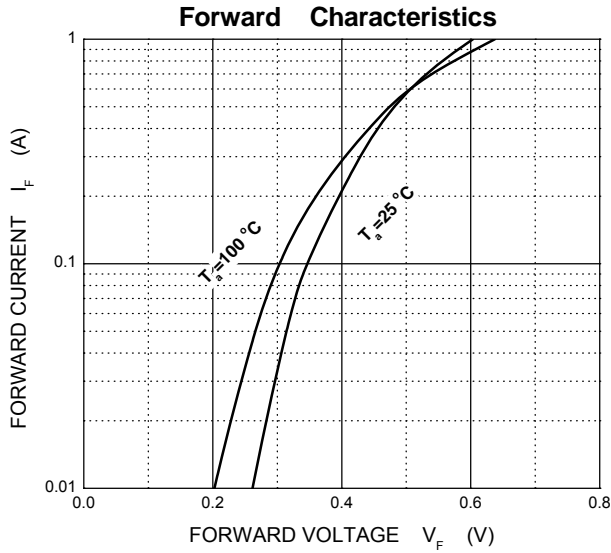
## Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	SPMBR	SPMBR	SPMBR	SPMBR	SPMBR	Unit
		0520	0530	0540	0560	0580	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	60	80	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	42	56	V
Mean Rectifying Current	I <sub>O</sub>	0.5					A
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	5.5					A
Power Dissipation	P <sub>D</sub>	410					mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	244					°C/W
Junction Temperature	T <sub>J</sub>	125					°C
Storage Temperature	T <sub>STG</sub>	-55 to +150					°C

**Electrical Characteristics** ( $T_A=25^\circ\text{C}$  unless otherwise noted)=2

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage SPMBR0520 SPMBR0530 SPMBR0540 SPMBR0560 SPMBR0580	$V_F$	-	-	0.45 0.55 0.55 0.70 0.80	V	$I_F=500\text{mA}$
Reverse current SPMBR0520 SPMBR0530 SPMBR0540 SPMBR0560 SPMBR0580	$I_R$	-	-	80	$\mu\text{A}$	$V_R=20\text{V}$ $V_R=30\text{V}$ $V_R=40\text{V}$ $V_R=60\text{V}$ $V_R=80\text{V}$
Capacitance Between Terminals	$C_T$	-	30		pF	$V_R=4\text{V}$ , $f=1\text{MHZ}$

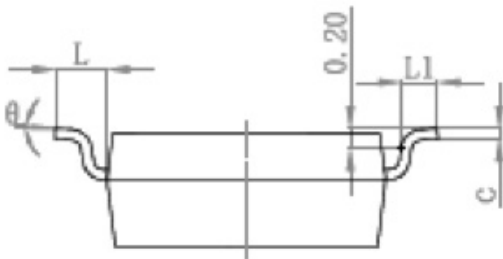
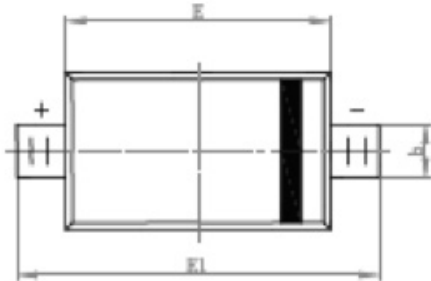
**Ratings and Characteristics Curves** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)



## SPMBR0520-SPMBR0580 Schottky Barrier Diodes

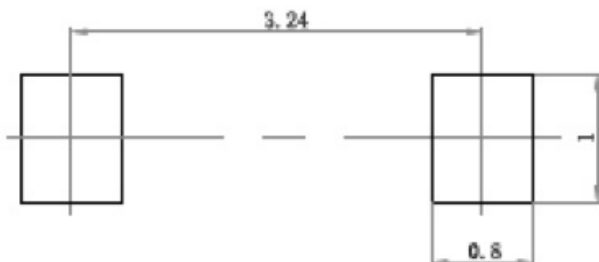
### Package Outline Dimensions

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Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

### Suggested Pad Layout



#### Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$ mm.
3. The pad layout is for reference purposes only.