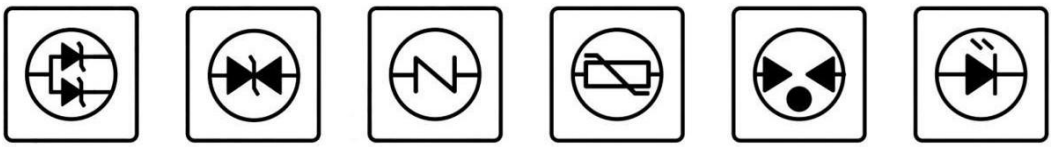
MSKSEMI 美森科
SEMICONDUCTOR



MBR0520-MS THRU MBR0580-MS

Product specification

MBR0520-MS THRU MBR0580-MS

Features

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

Reference News

PACKAGE OUTLINE	PIN Configuration
	
SOD-123	

MARKING

MBR0520-MS	MBR0530-MS	MBR0540-MS	MBR0560-MS	MBR0580-MS
R2	R3	R4	R6	R8

Maximum Ratings @Ta=25℃

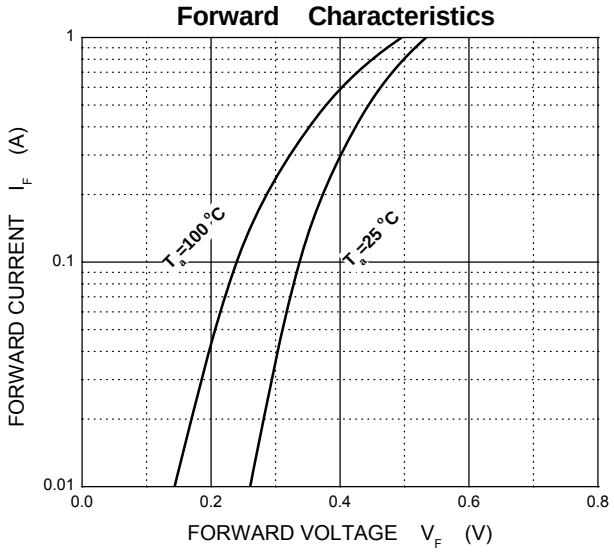
Parameter	Symbol	MBR0520-MS	MBR0530-MS	MBR0540-MS	MBR0560-MS	MBR0580-MS	Unit
Maximum recurrent peak reverse voltage Maximum RMS voltage	V_{RRM} V_{RMS}	20 14	30 21	40 28	60 42	80 56	V
Mean rectifying current	I_O	0.5					A
Non-repetitive Peak forward surge current @t=8.3ms	I_{FSM}	5.5					A
Power Dissipation	P_D	410					mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	244					℃/W
Junction temperature	T_j	125					℃
Storage temperature	T_{stg}	-55~+150					℃

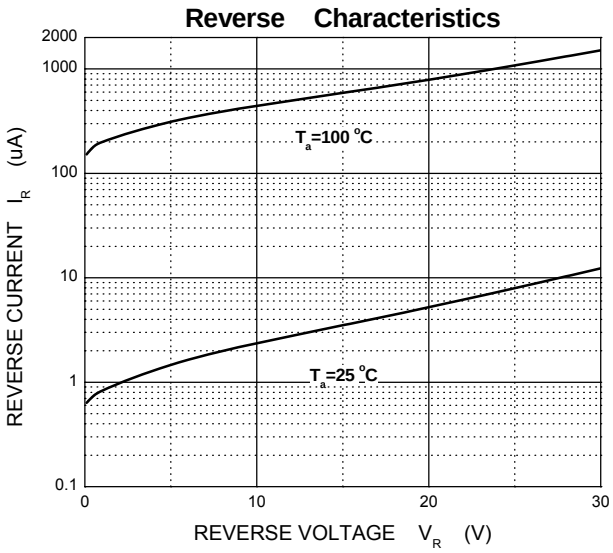
ELECTRICAL CHARACTERISTICS

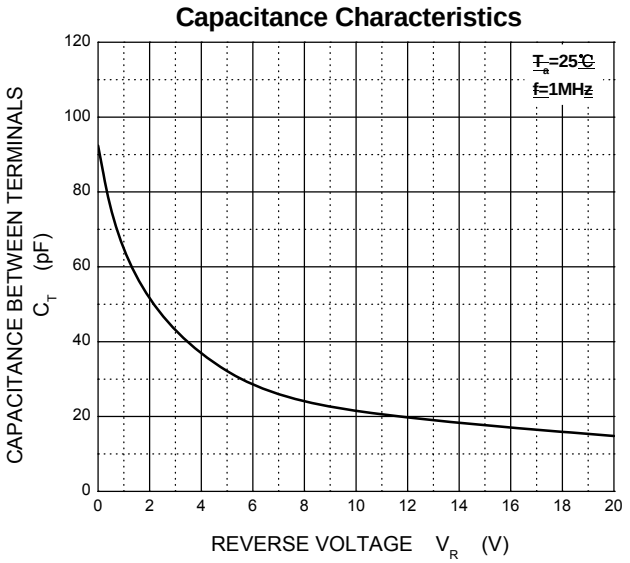
Ta =25 ℃ unless otherwise specified

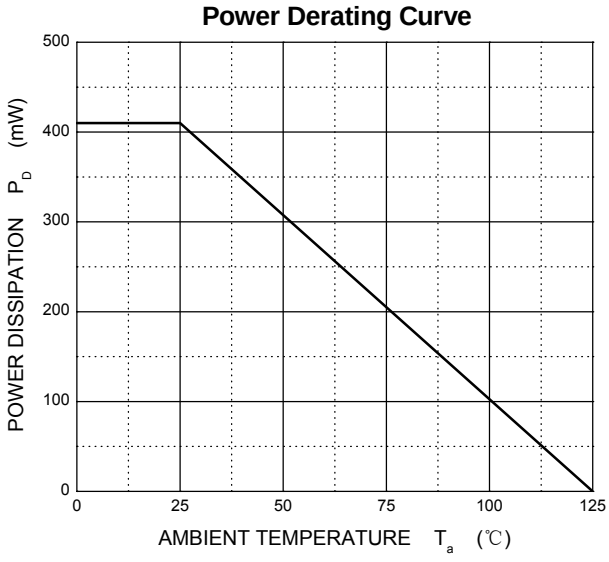
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage MBR0520-MS MBR0530-MS MBR0540-MS MBR0560-MS MBR0580-MS	V_F			0.45 0.55 0.55 0.70 0.80	V	I_F=500mA
Reverse current MBR0520-MS MBR0530-MS MBR0540-MS MBR0560-MS MBR0580-MS	I_R			80	μA	V_R=20V V_R=30V V_R=40V V_R=60V V_R=80V
Capacitance between terminals	C_T		30		pF	V_R=4V, f=1MHZ

Typical Characteristics

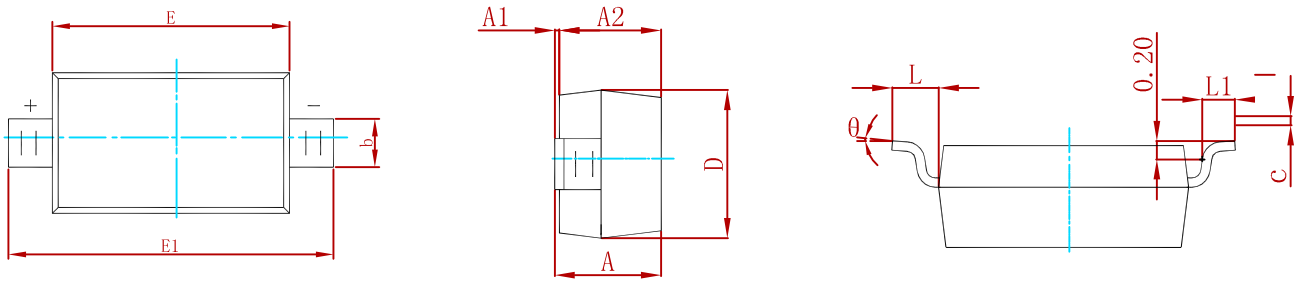






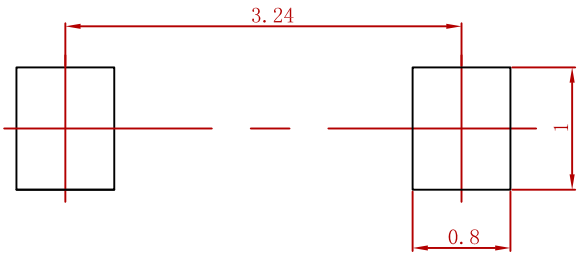


PACKAGE MECHANICAL DATA



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:± 0.05mm.
3.The pad layout is for reference purposes only.

REELSPECIFICATION

P/N	PKG	QTY
MBR0520-MS THRU MBR0580-MS	SOD-123	3000

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