MBR1100 MBR1100S

Small Signal Schottky Barrier Diode

Features

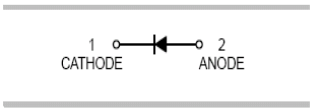
- Low power loss, high efficiency

SOD-123

SOD-323

Mechanical Data

- Case: SOD-123, SOD-323
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Tin-plated; solderability per MIL-STD-202, Method 208



Part Number	Package	Shipping Quantity	Marking Code
MBR1100	SOD-123	3000pcs / Tape & Reel	110
MBR1100S	SOD-323	3000pcs / Tape & Reel	110

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
RMS Reverse Voltage	V_{RMS}	70	V
Maximum Average Forward Output Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current (8.3ms single half sine-wave)	I_{FSM}	25	A

Parameter	Symbol	MBR1100	MBR1100S	Unit
Power Dissipation	P_D	500	250	mW
Operating junction Temperature	T_J	150		°C
Storage Temperature Range	T_{STG}	-55 ~ +150		°C

Electrical Characteristics (@ T_A = 25℃ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F = 1A	-	-	0.85	V
		V_R = 100V, T_A = 25°C	-	-	20	μA
		V_R = 100V, T_J = 125°C	-	-	10	mA
Typical Junction Capacitance	C_J	V_R = 4V, f = 1MHZ	-	-	160	pF

Ratings and Characteristic Curves (@ T_A = 25℃ unless otherwise specified)

Fig. 1 - Forward Current Derating Curve

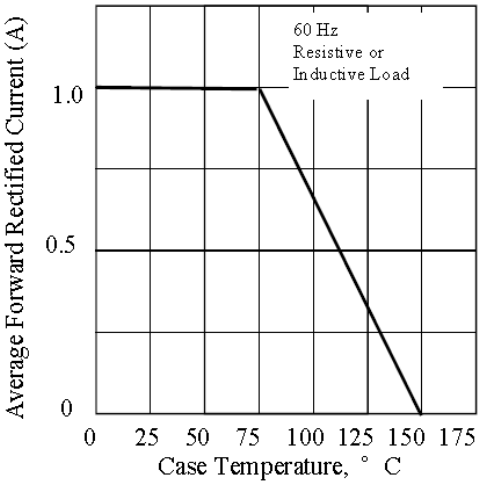


Fig 2. - Typical Junction Capacitance

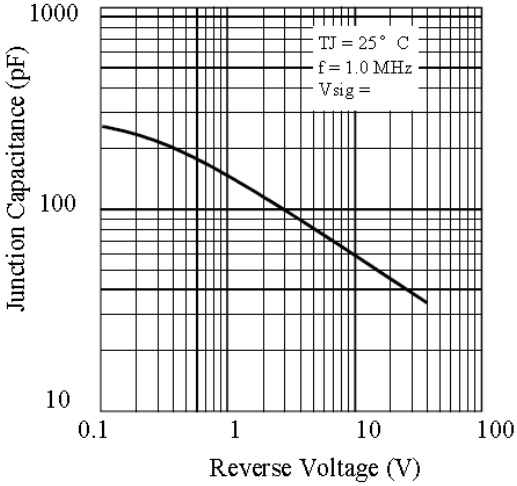


Fig 3. - Typical Instantaneous Forward Characteristics

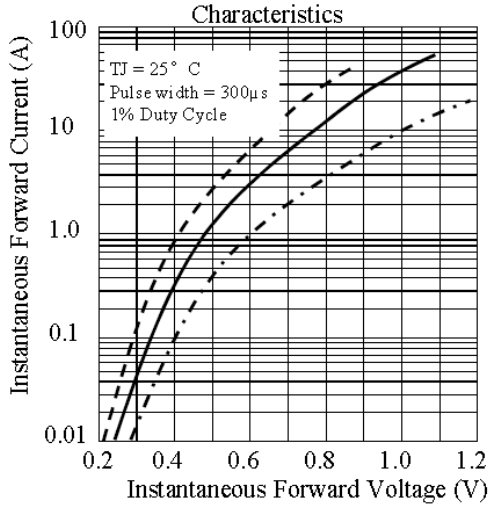
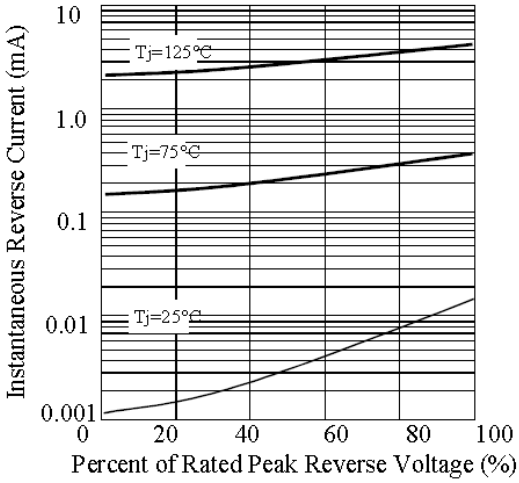


Fig 4. - Typical Reverse Characteristics



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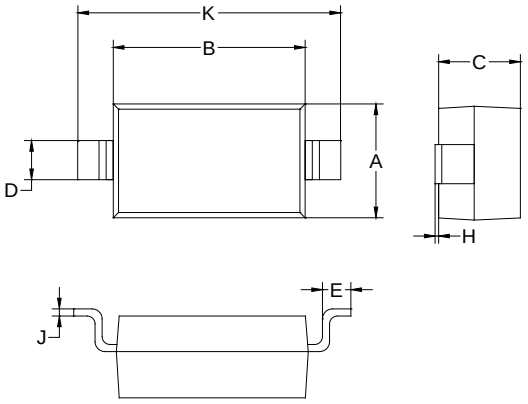
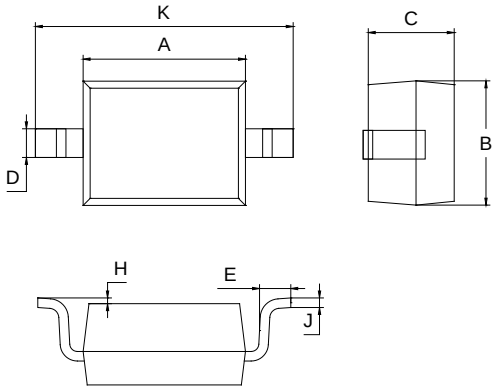
Package Outline Dimensions (Unit: mm)



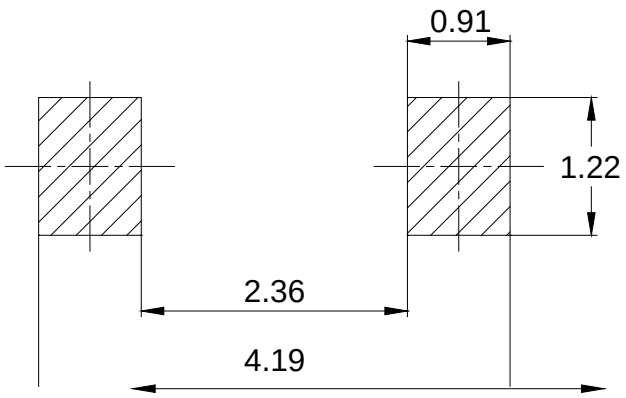
SOD-123		
Dimension	**Min.**	**Max.**
A	1.45	1.75
B	2.55	2.85
C	1.00	1.30
D	0.50	0.60
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85



SOD-323		
Dimension	**Min.**	**Max.**
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout (Unit: mm)

SOD-123



SOD-323