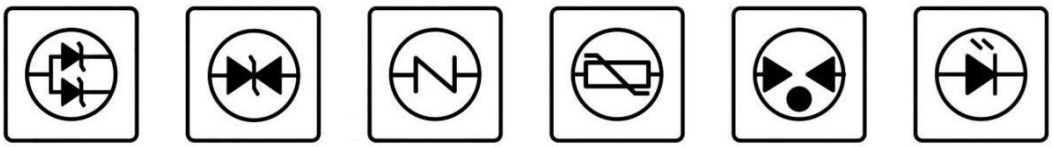
MSKSEMI 美森科
SEMICONDUCTOR



MBRS1100T3G(MS)

Product specification

MBRS1100T3G(MS)

FEATURES

- Very Low Forward Voltage Drop
- Small Compact Surface Mountable Package
- Highly Stable Oxide Passivated Junction
- Guardring for Stress Protection
- Pb / RoHS Free

Reference News

Outline	Marking
	
SMB	

MECHANICALDATA

- **Case :** SMB Molded plastic
- **Epoxy :** UL94V-O rate flame retardant
- **Lead :** Lead Formed for Surface Mount
- **Polarity :** Color band denotes cathode end
- **Mounting position :** Any
- **Weight :** 0.117 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Reverse Voltage	V_{RRM}	100	V
Maximum Working Peak Reverse Voltage	V_{RWM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Rectified Forward Current	$I_{F(AV)}$	1.0 (T_L = 120°C) 2.0 (T_L = 100°C)	A
Non-repetitive Peak Surge Current (Surge applied at rated load conditions half wave, single phase, 60Hz)	I_{FSM}	50	A
Maximum Instantaneous Forward Voltage (Note 1) (I_F = 1.0 A, T_J = 25°C)	V_F	0.75	V
Maximum Instantaneous Reverse Current (Note1) (Ratedc Voltage, Tj = 25°C) (Ratedc Voltage, Tj = 100°C)	I_R	 0.5 5.0	mA
Thermal Resistance - Junction to Lead (T_L = 25°C)	$R\theta JL$	22	°C/W
Operating Junction Temperature	T_J	- 65 to +150	°C

Note: (1) Pulse Test : Pulse Width = 300μs Duty Cycle ≤ 2%

RATING AND CHARACTERISTIC CURVES

FIG.1 - CURRENT DERATING (LEAD)

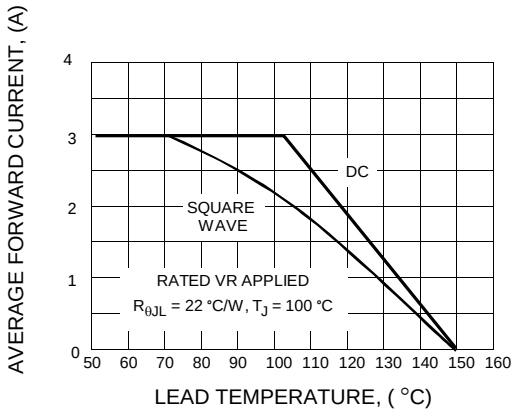


FIG.2 - POWER DISSIPATION

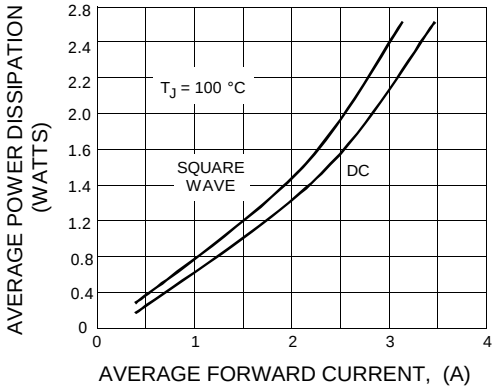


FIG.3 - TYPICAL FORWARD VOLTAGE

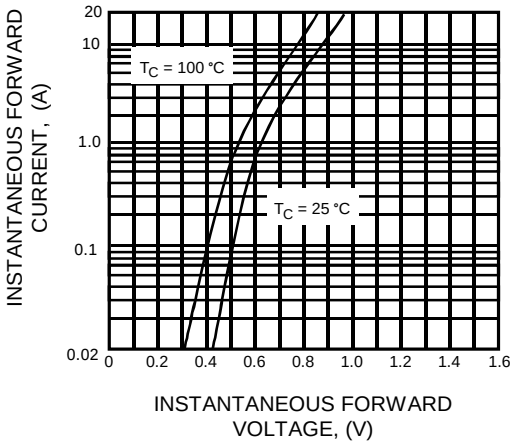


FIG.4 - TYPICAL REVERSE CURRENT

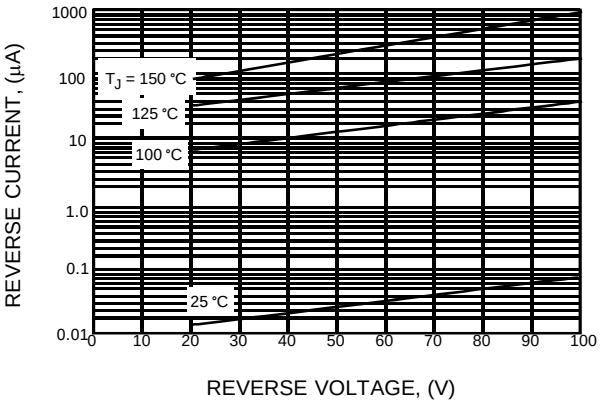
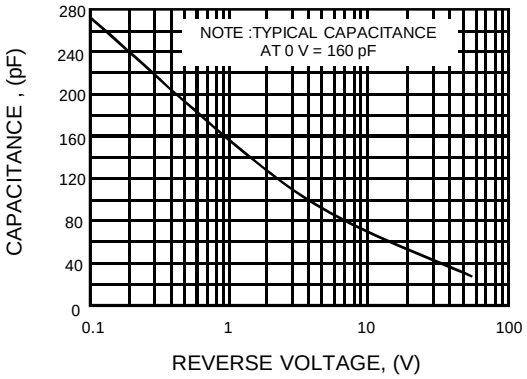
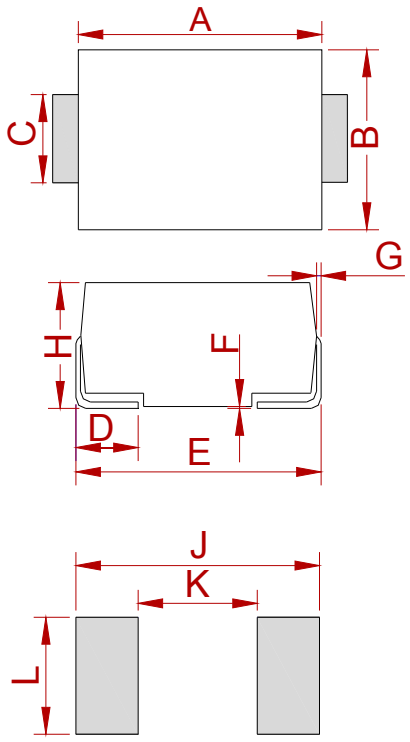


FIG. 5 TYPICAL CAPACITANCE



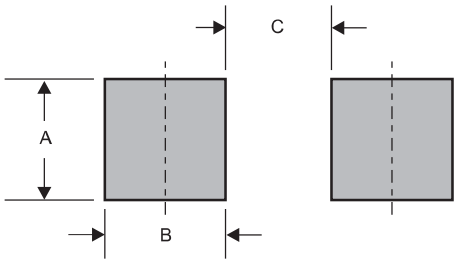
PACKAGE MECHANICAL DATA



DO-214AA (SMB)

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.75	0.167	0.187
B	3.30	3.94	0.130	0.155
C	1.85	2.21	0.073	0.087
D	0.76	1.52	0.030	0.060
E	5.08	5.59	0.200	0.220
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	2.11	2.44	0.083	0.096
J	6.80		0.270	
K		2.60		0.100
L	2.40		0.090	

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMB	0.078 (2.00)	0.059 (1.50)	0.110 (2.80)

REELSPECIFICATION

P/N	PKG	QTY
MBRS1100T3G(MS)	SMB	3000

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