

### **Features**

- Average Forward Current: I<sub>F(AV)</sub>=1A
- Polarity: Color band denotes cathode

# SOD-123FL



# **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
MBR120ESFT3G	SOD-123FL	K12	3000

# Maximum Ratings (Ta=25°C unless otherwise noted) Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Type Number		Limit	Unit
Maximum Recurrent Peak Reverse Voltage		20	V
Maximum RMS Voltage		14	V
Maximum DC Blocking Voltage	20	V	
Maximum Average Forward Rectified C	Current		
See Fig. 1		1.0	А
Peak Forward Surge Current, 8.3 ms s	ingle half sine-wave		
superimposed on rated load (JEDEC method)		30	Α
Maximum Instantaneous Forward Voltage at 1.0A		0.55	V
Maximum DC Reverse Current	Ta=25℃	0.2	mA
at Rated DC Blocking Voltage	Ta=100°C	10	mA
Typical Junction Capacitance (Note1)		110	pF
Typical Thermal Resistance R JA (Note 2)		80	°C/W
Operating Temperature Range T <sub>J</sub>		-65 —+125	°C
Storage Temperature Range Tsrc		-65 <del></del> +150	°C

### NOTES:

- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance Junction to Ambient.



## **Typical Characteristics**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

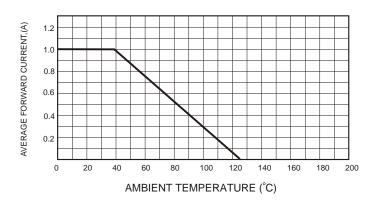
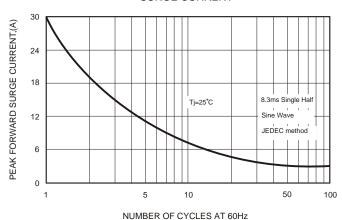


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



350 300 300 250 250 150 100 50

REVERSE VOLTAGE,(V)

FIG.4-TYPICAL JUNCTION CAPACITANCE

FIG.2-TYPICAL FORWARD

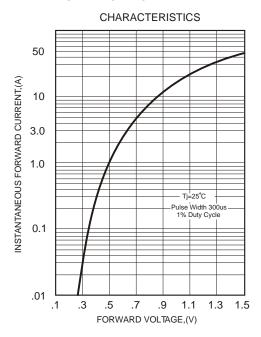
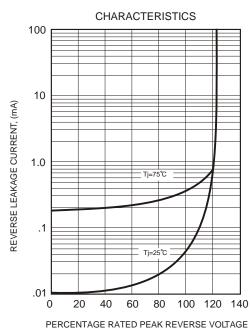


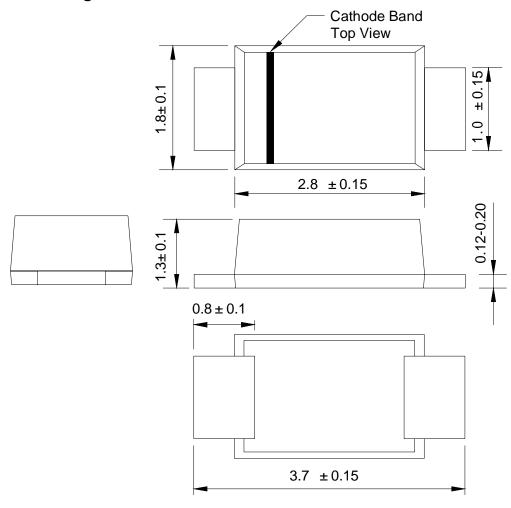
FIG.5 - TYPICAL REVERSE



.05



# **SOD-123FL Package Outline Dimensions**





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