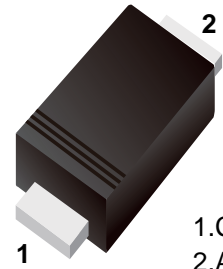


■ Schottky Diodes

■ Features

- Low power loss,high efficiency
- High forward surge current capability
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0



1.Cathode  
2.Anode

■ Simplified outline(SOD-123FL)



■ Absolute Maximum Ratings Ta = 25°C

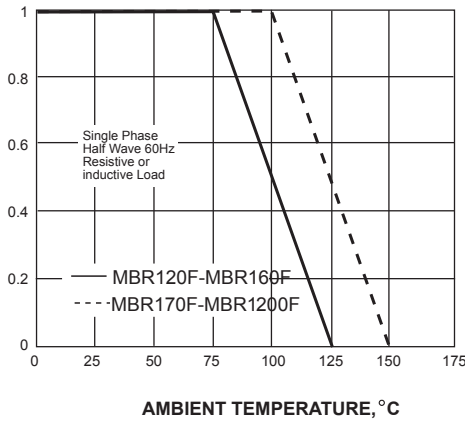
Parameter	Symbol	MBR 120	MBR 130	MBR 140	MBR 150	MBR 160	MBR 170	MBR 180	MBR 190	MBR 1100	MBR 1200	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	70	80	90	100	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	49	56	63	70	140	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	70	80	90	100	200	
Forward Voltage @ I <sub>F</sub> =1A	V <sub>F</sub>	0.55		0.7		0.85			0.95			
Averaged Forward Current.Ta=75°C	I <sub>FAV</sub>	1										A
Peak Forward Surge Current Ta=25°C	I <sub>FSM</sub>	25										
Maximum DC Reverse Current Ta=25°C Ta=100°C	I <sub>R</sub>	1										mA
		10										
Typical Junction Capacitance (Note.1)	C <sub>j</sub>	110			80						pF	
Junction Temperature	T <sub>J</sub>	-65 to 125					-65 to 150					°C
Storage Temperature	T <sub>stg</sub>	-65 to 150										

Note.1:Measured at 1MHz and applied reverse voltage of 4.0V D.C.

■ Typical Characteristics

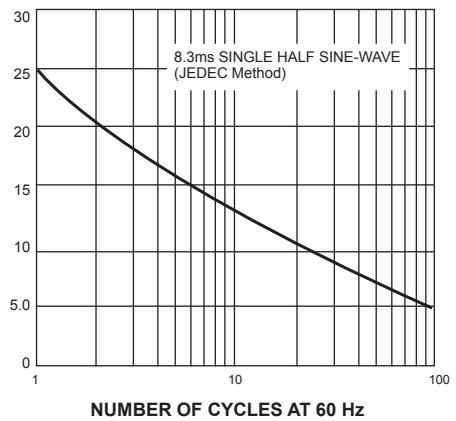
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



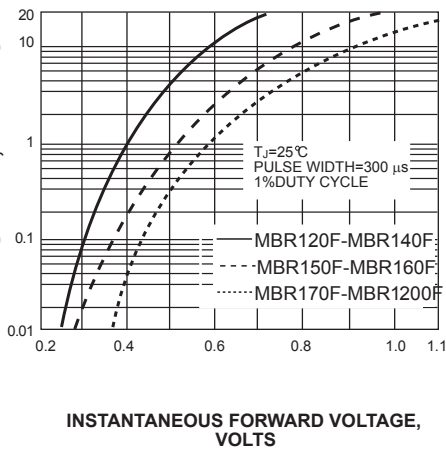
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



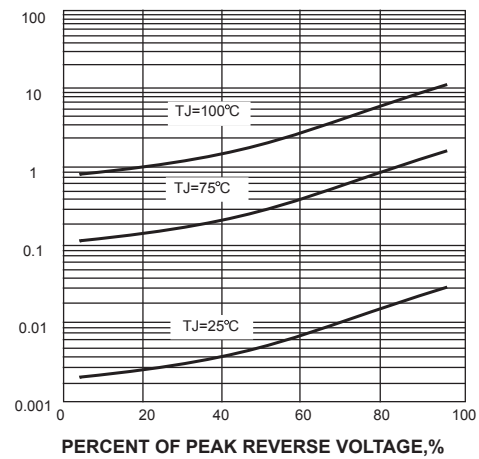
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



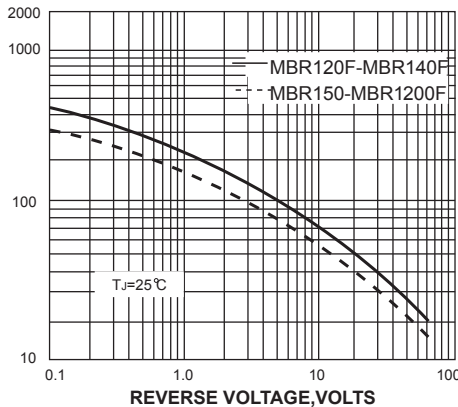
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



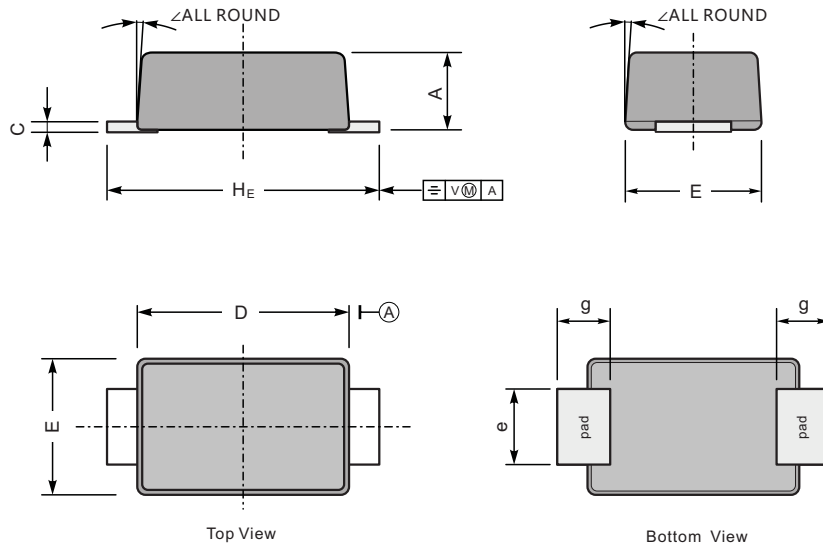
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



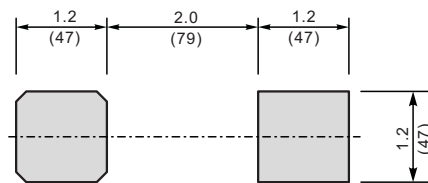
**Package Outline SOD-123FL**

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	e	g	H <sub>E</sub>	$\angle$
mm	max	1.3	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

**The recommended mounting pad size**



Unit:  $\frac{\text{mm}}{\text{(mil)}}$

**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
SOD-123FL	Tape/Reel, 13" reel	10000	EIA-481-1
	Tape/Reel, 7" reel	3000	EIA-481-1