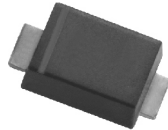
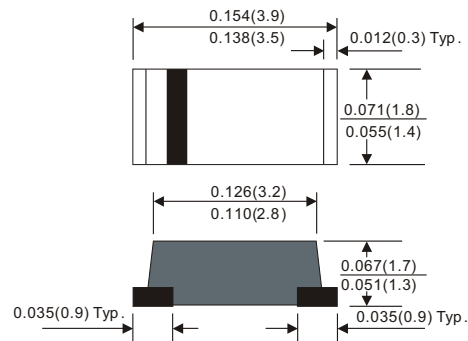


MBR120F thru MBR1100F

1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



SOD-123F



FEATURES

- Schottky barrier chip
- guard ring die construction for transient protection
- Low forward loss, high efficiency
- High surge capability
- High current capability and low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application
- Plastic material UL flammability Classification rating 94V-0

MECHANICAL DATA

Case : SOD-123F Plastic
 Lead : Solderable per MIL-STD-202, Method 208
 Polarity : Cathode band
 Marking Type Code
 weight : 0.01 grams approx

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	MBR120F	MBR140F	MBR160F	MBR1100F	Units
Repetitive Peak Reverse Voltage DC Blocking Voltage	VRRM VDC	20	40	60	100	V
RMS Reverse Voltage	VR(RMS)	14	28	42	70	V
Average Rectifier Output at $T_L = 90^\circ\text{C}$	IO	1.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	20				A
Typical Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	88				$^\circ\text{C} / \text{W}$
Operating and Storage Temperature Range	T_{STG}	-55 to + 150				$^\circ\text{C}$
		-55 to + 125		-55 to + 150		
Forward Voltage At 1.0A (Note 1)	VF	0.5	0.55	0.7	0.85	V
Reverse Leakage Current $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$	IR	0.2				mA
		10		5		
Marking Code		T2	T4	T6	TA	

NOTES :

1. Pulse test with 300 μs pulse width, 2% duty cycle

MBR120F thru MBR1100F

1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

RATING AND CHARACTERISTICS CURVES MBR120F thru MBR1100F

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

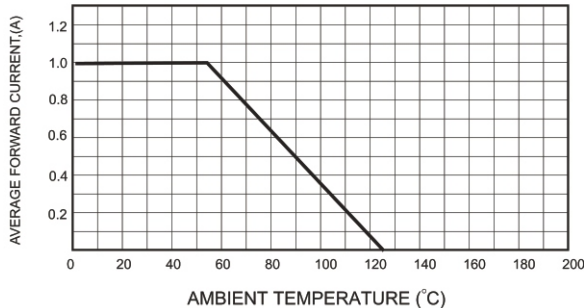


FIG.2-TYPICAL FORWARD CHARACTERISTICS

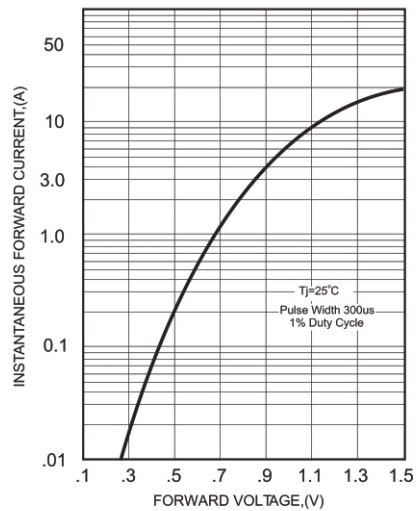


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

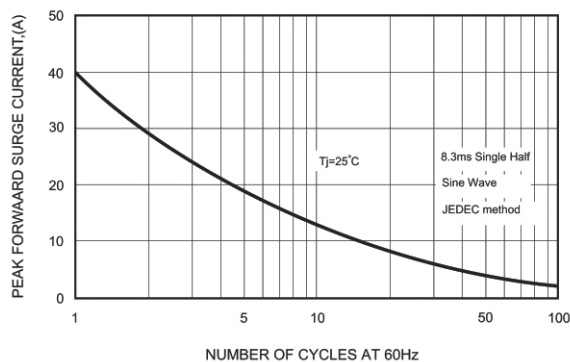


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

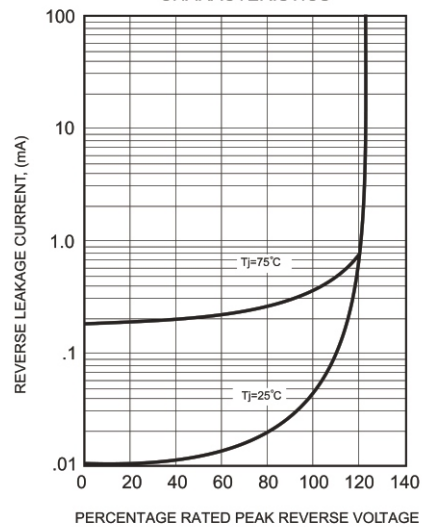


FIG.4-TYPICAL JUNCTION CAPACITANCE

