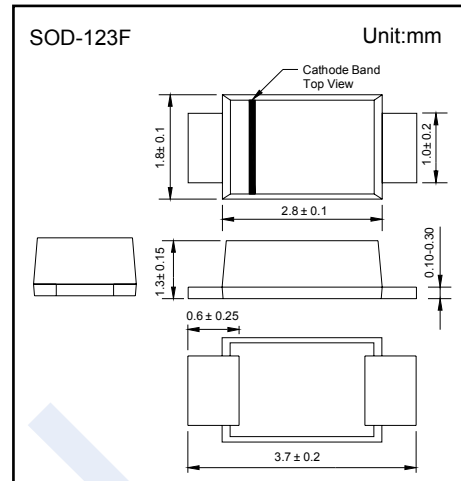


Schottky Diodes

MBR120F ~ MBR1200F

■ Features

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



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	MBR120F	MBR130F	MBR140F	MBR150F	MBR160F	MBR170F	MBR180F	MBR190F	MBR1100F	MBR1200F	Unit	
Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	70	80	90	100	200	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	140		
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	70	80	90	100	200		
Forward Voltage @ I _F =1A	V _F	0.55		0.7			0.85			0.95			
Averaged Forward Current Ta=75°C	I _{FAV}	1											A
Peak Forward Surge Current Ta=25°C	I _{FSM}	25											
Maximum DC Reverse Current Ta=25°C Ta=100°C	I _R	1											mA
		10											
Typical Junction Capacitance (Note.1)	C _j	110				80							pF
Junction Temperature	T _J	-65 to 125						-65 to 150					°C
Storage Temperature	T _{stg}	-65 to 150											

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

■ Marking

NO.	MBR120F	MBR130F	MBR140F	MBR150F	MBR160F	MBR170F	MBR180F	MBR190F	MBR1100F	MBR1200F
Marking	D12	D13	D14	D15	D16	D17	D18	D19	D110	D120

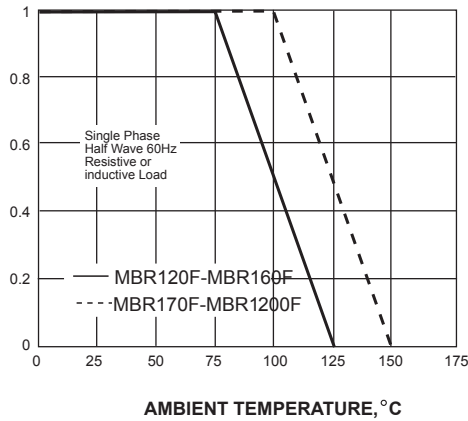
Schottky Diodes

MBR120F ~ MBR1200F

■ Typical Characteristics

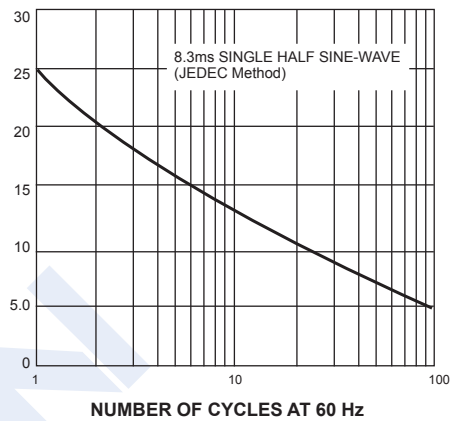
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



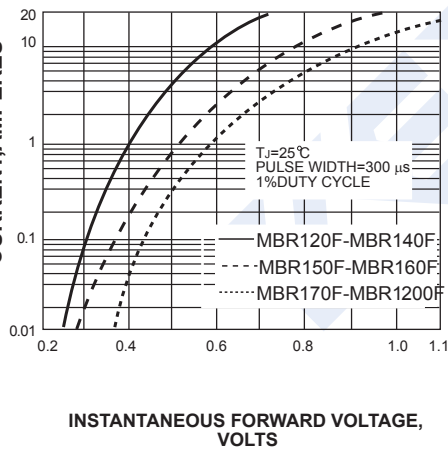
PEAK FORWARD SURGE CURRENT, AMPERES

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



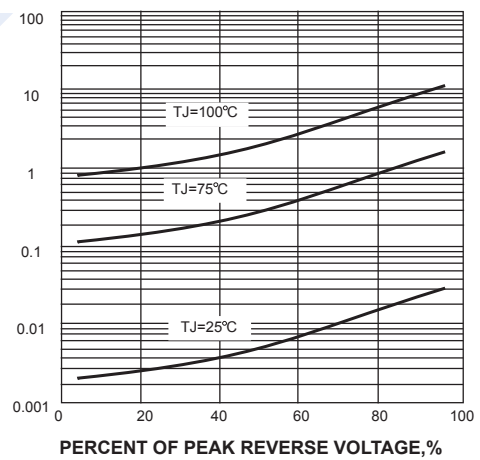
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

