

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: MBF
- Terminals: Solderable per MIL-STD-750, Method 2026

MARKING

Part Number	Marking	Part Number	Marking
MB140F-C	MB14F	MB1100F-C	MB110F
MB160F-C	MB16F	MB1200F-C	MB120F

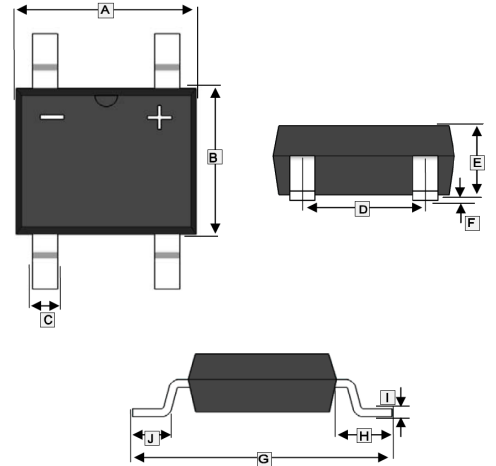
PACKAGE INFORMATION

Package	MPQ	Leader Size
MBF	5K	13 inch

ORDER INFORMATION

Part Number	Type
MB140F-C~MB1200F-C	Lead (Pb)-free and Halogen-free

MBF



	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.5	5.0	F	0.2 TYP.	
B	3.6	4.1	G	6.4	7.0
C	0.5	0.8	H	1.3	1.7
D	2.3	2.7	I	0.15	0.22
E	1.2	1.6	J	0.5	1.1

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	Part Number				Unit
		MB140F-C	MB160F-C	MB1100F-C	MB1200F-C	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	60	100	200	V
Maximum RMS Voltage	V_{RMS}	28	42	70	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	100	200	V
Maximum Average Forward Current	$I_{F(AV)}$	1				A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	40		30		A
Maximum Instantaneous Forward Voltage @ $I_F=1A$	V_F	0.55	0.7	0.85	0.9	V
Maximum DC Reverse Current @Rated DC Blocking Voltage	$T_A=25^\circ C$	0.3		0.2	0.1	mA
	$T_A=100^\circ C$	10		5	2	
Typical Junction Capacitance ¹	C_J	110	80			pF
Thermal Resistance Junction-Ambient ²	$R_{\theta JA}$	100				°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	125, -55~150				°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

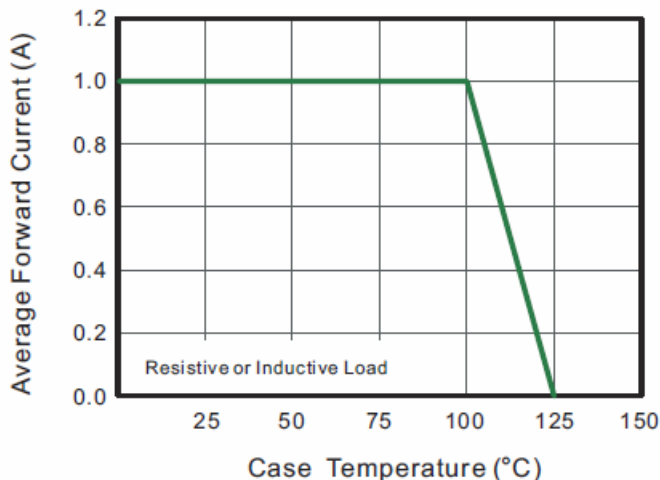


Fig.2 Typical Reverse Characteristics

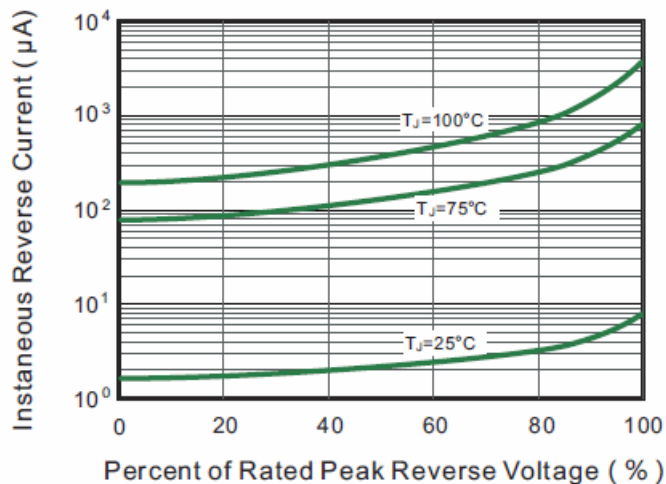


Fig.3 Typical Instantaneous Forward Characteristics

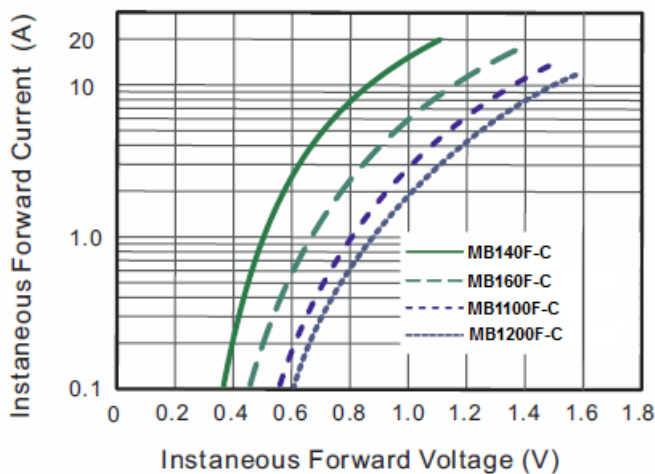


Fig.4 Typical Junction Capacitance

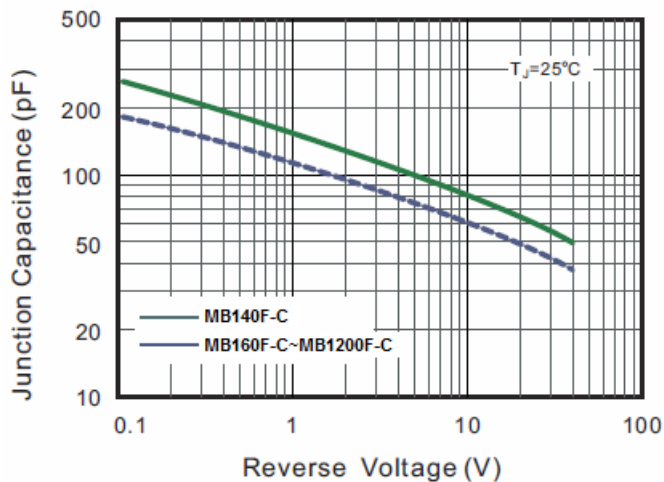


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

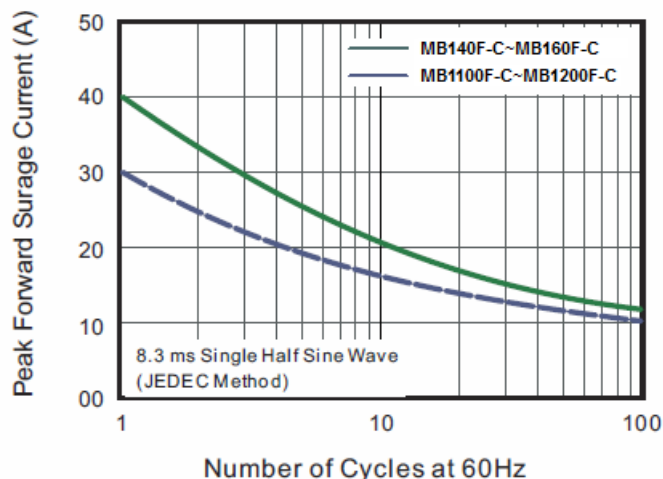


Fig.6 Typical Transient Thermal Impedance

