Elektronische Bauelemente

MB140F-C~MB1200F-C

Voltage 40V~200V

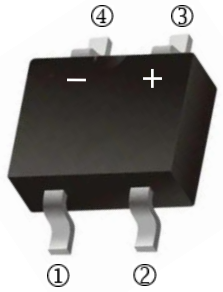
1.0 Amp Surface Mount Schottky Bridge Rectifiers

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

FEATURES

- High Surge Current Capability
- Designed for Surface Mount Application

MBF



MECHANICAL DATA

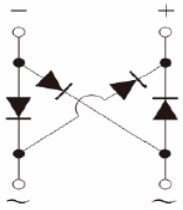
- Case: MBF
- Terminals: Solderable per MIL-STD-750, Method 2026

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

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 de-rate 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°C	I_R	0.3		0.2	0.1	mA
	T_A=100°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.

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

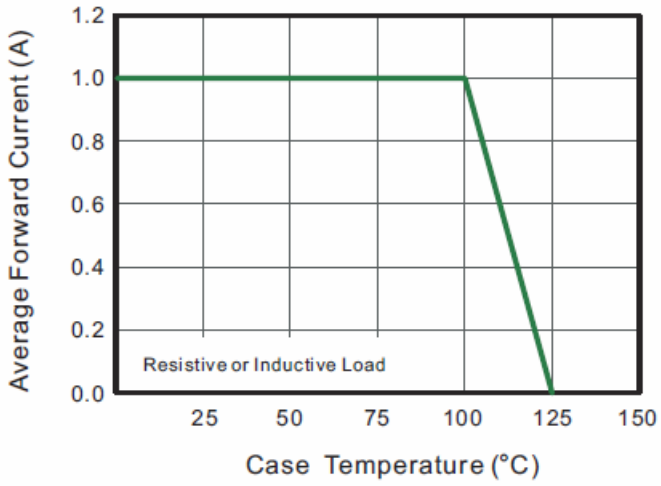


Fig.2 Typical Reverse Characteristics

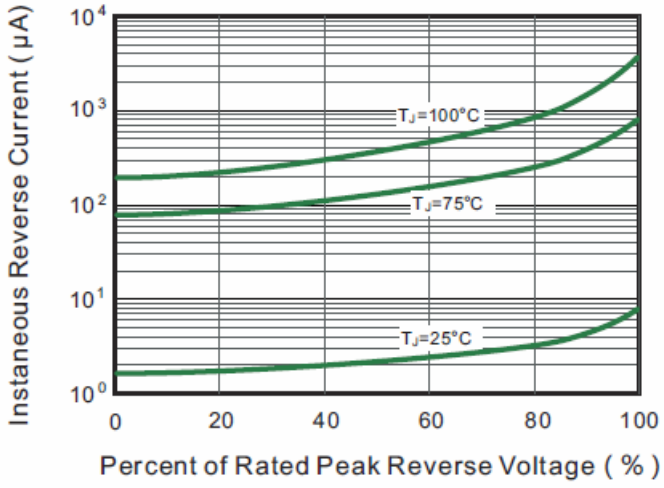


Fig.3 Typical Instaneous Forward Characteristics

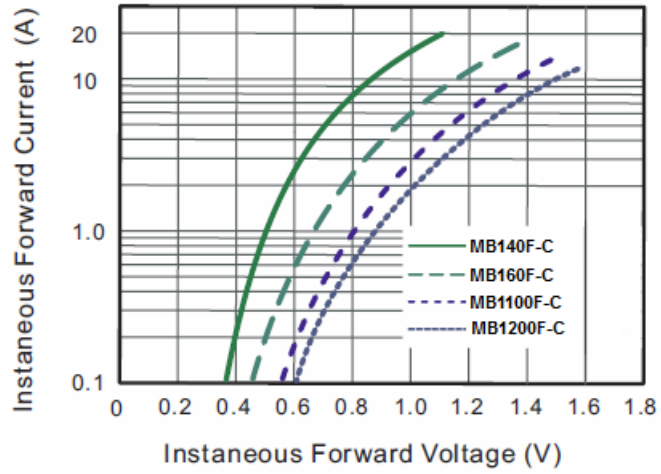


Fig.4 Typical Junction Capacitance

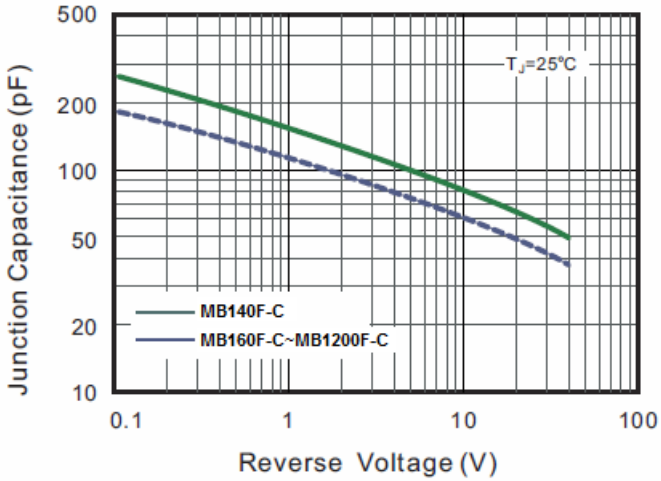


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

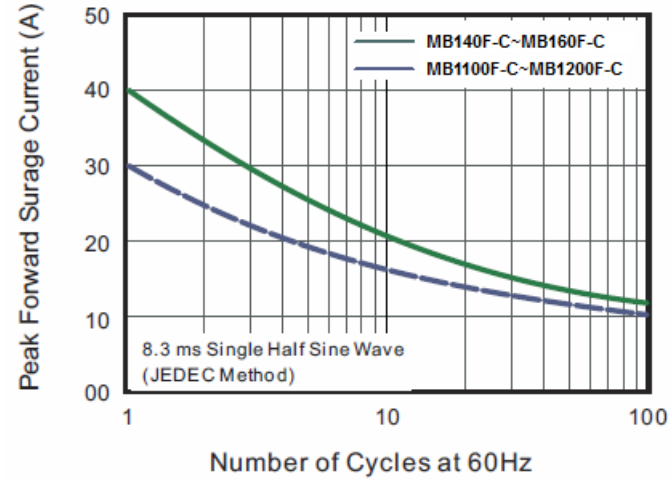
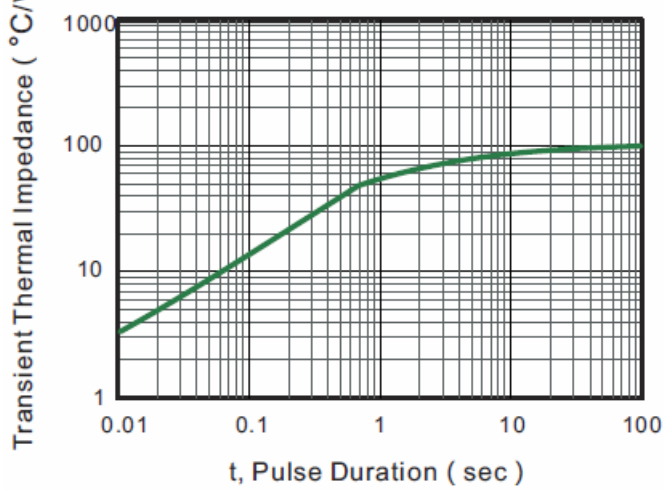


Fig.6- Typical Transient Thermal Impedance



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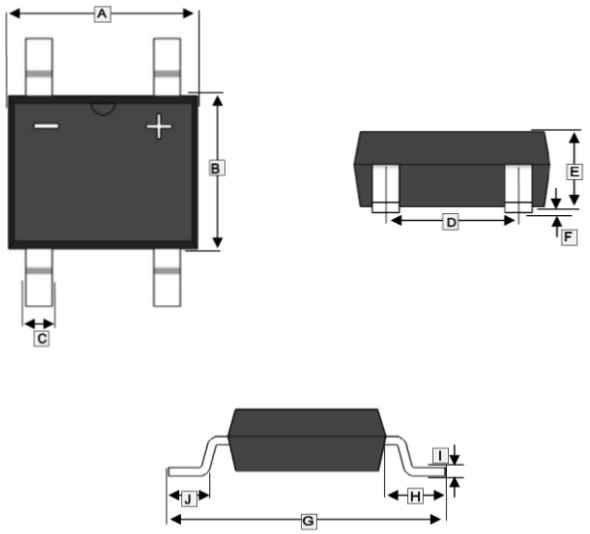
PACKAGE OUTLINE DIMENSION

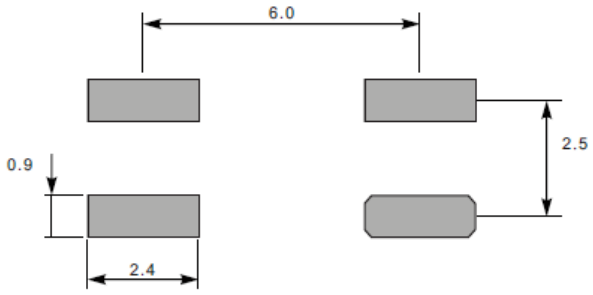
MBF



REF.	Millimeter	
	Min.	Max.
A	4.50	5.00
B	3.60	4.10
C	0.50	0.80
D	2.30	2.70
E	1.20	1.60
F	0.20 TYP.	
G	6.40	7.00
H	1.30	1.70
I	0.15	0.22
J	0.50	1.10

MOUNTING PAD LAYOUT

MBF



*Dimensions in millimeters