

RoHS compliant product

A suffix of "-C" specifies halogen & lead-free

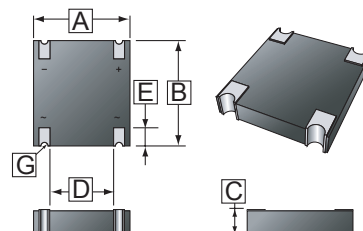
FEATURES

- High current capability
- Internal structure with GPRC (Glass Passivated Rectifier Chip) inside
- Leadless chip form, no lead damage
- Solder Joint, No Wire bond & Lead Frame
- Low profile package
- For surface mounted applications
- Built-in strain relief
- Low power loss, high efficiency
- High current capability and surge capacity
- Plastic package has UL Flammability Classification 94V-0

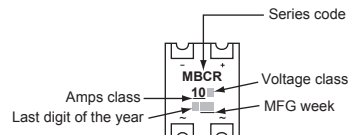
MECHANICAL DATA

- Case : Packed with FRP substrate and epoxy under-filled
- Terminals : Tin plated , solderable per MIL-STD-750, Method 2026
- Polarity: Laser Marking
- Weight: 0.07 grams

Case: MBCR



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	5.20	5.40	E	1.00	1.20
B	5.70	5.90	F	0.85	0.95
C	1.10	1.30	G	R 0.2 REF.	
D	3.25	3.35			



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

PARAMETERS	SYMBOL	MB105	MB106	MB107	UNIT
Peak Repetitive Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Working Peak Reverse Voltage	V_{RMS}	420	560	700	
DC Blocking Voltage	V_{DC}	600	800	1000	
Maximum Average Forward Rectified Current @T _A =55°C	$I_{(AV)}$	1.0			A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	30			A
Maximum Forward Voltage at IF=0.4A, at IF=1.0A	V_F	0.9 1.0			V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =125°C	I_R	5 200			uA
I ² t Rating for Fusing (t<8.3ms)	I ² t	3.74			A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	25			pF
Typical Thermal Resistance (Note2)	R _{θJA}	110			°C/W
Operating and Storage temperature range	T _J , T _{STG}	-55 ~ 175			°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC

2. Thermal resistance from junction to ambient measured on P.C.B. with 5.0mm² (0.03 mm thick) land areas.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

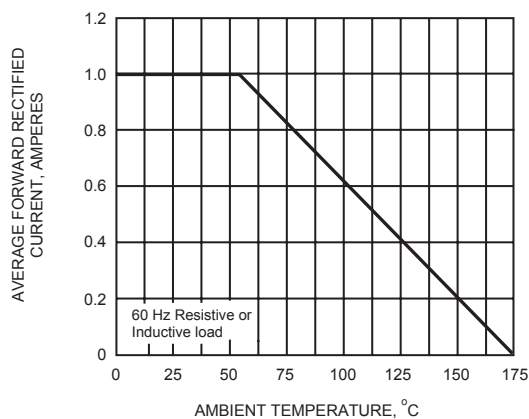


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

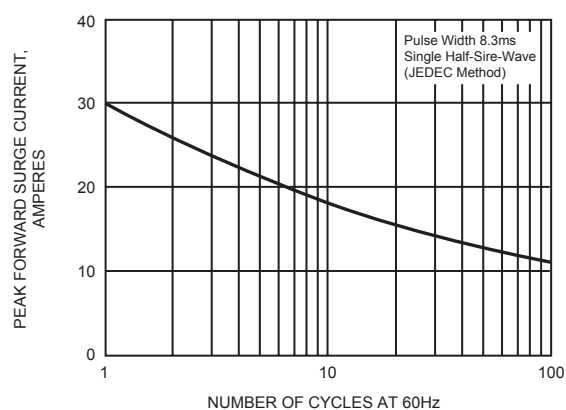


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

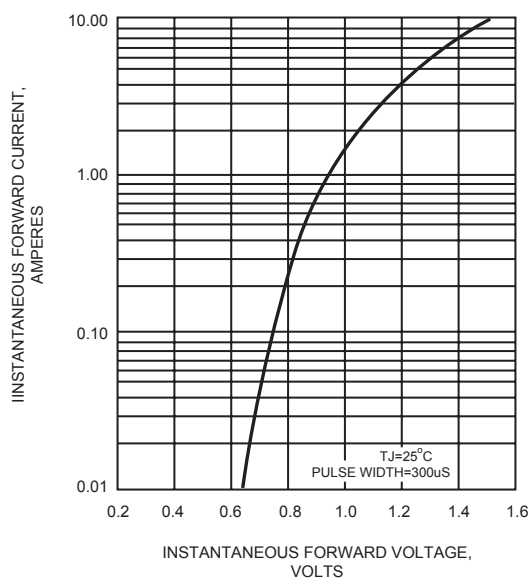


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

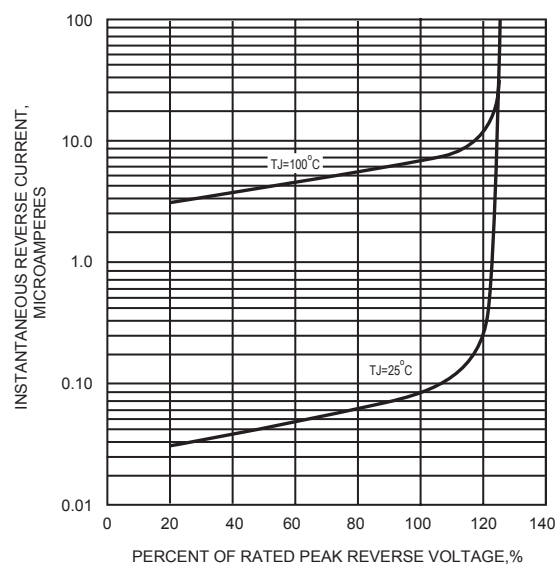


FIG.5 - TYPICAL JUNCTION CAPACITANCE

