

RoHS compliant product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Internal structure with GPRC (Glass Passivated Rectifier Chip) inside
- Lead less chip form, no lead damage
- Lead-free solder joint, no wire bond & lead frame
- Low power loss, high efficiency
- High current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

APPLICATION

- AC/DC Power Supply
- Communication Equipment

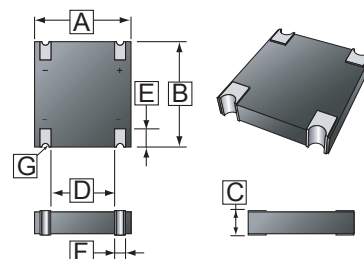
MECHANICAL DATA

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

PACKAGE INFORMATION

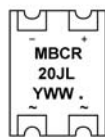
Package	MPQ	LeaderSize
MBCR	5K	13' inch

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			

MARKING

	<p>MBCR = Series code 20 = Amps class (2.0A) J = Voltage class J = 600V K = 800V M = 1000V L = Low VF - = Halogen-free type</p>
<p>Y = Last digit of the year 9 = 2009 0 = 2010 1 = 2011</p>	<p>WW = Mfg week 01 = First week 02 = Second week 03 = Third week</p>

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

Parameters	Symbol	Rating		Unit
		MB206L	MB207L	
Repetitive peak reverse voltage	V _{RRM}	800	1000	V
Average Forward Current	I _{F(AV)}	2.0		A
Peak forward surge current 8.3ms single half sine-wave	I _{FSM}	60		A
Operating and Storage temperature range	T _J , T _{STG}	-55 ~ 175		°C

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameters		Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	@ $I_F = 2.0\text{A}$	V_F	-	0.92	0.95	V
Repetitive peak reverse current $V_R = \text{Max. } V_{RRM}$		I_{RRM}	-	0.08	5	μA
Current squared time $t < 8.3\text{ms}$		I^2t	-	14.9	-	A^2s
Junction Capacitance, $V_R = 4\text{V}$, $f = 1.0\text{MHz}$		C_J	-	35	-	pF
Thermal Resistance Junction to Ambient ¹		$R_{\theta JA}$	-	60	-	$^\circ\text{C/W}$
Thermal Resistance Junction to Lead ^{1,2}		$R_{\theta JL}$	-	3	-	

Note:

1. Thermal resistance, junction to ambient, measured on PC board with 5.0 x 5.0mm (0.03mm thick) land areas.
2. The thermal resistance is measured over the centered point of the copper pad.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

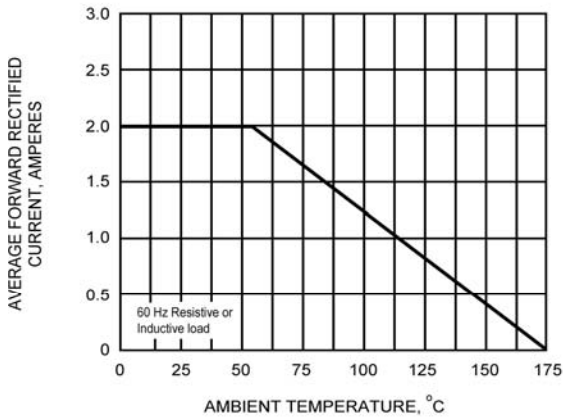


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

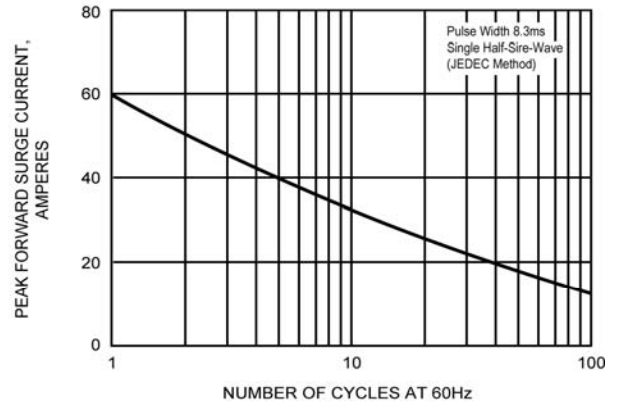


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

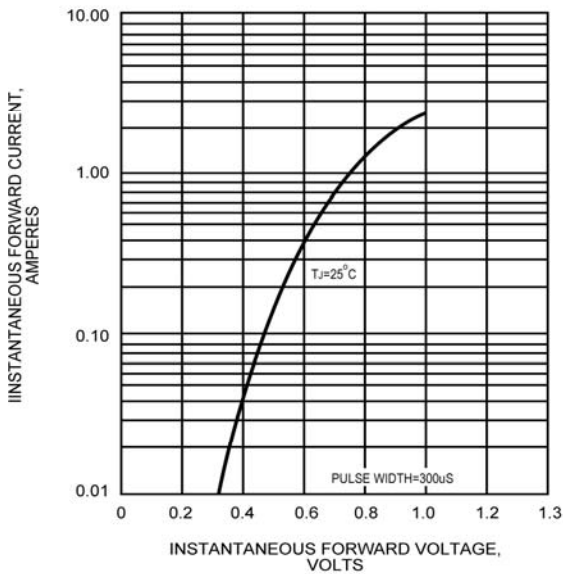


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

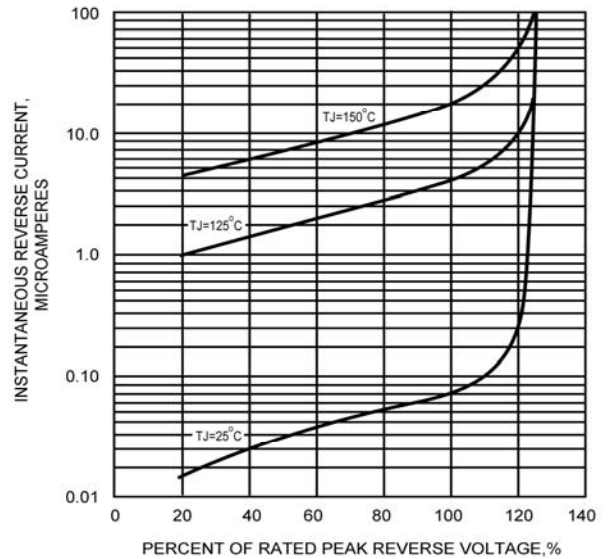


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

