

MBCR10EJH

● **FEATURES**

- * Halogen-free type
- * Internal structure with GPRC (glass passivated rectifier chip) inside
- * Compliance to RoHS product
- * Lead less chip form, no lead damage
- * Low power loss, High efficiency
- * High current capability
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

● **APPLICATION**

- * AC/DC Power Supply
- * Communication Equipment

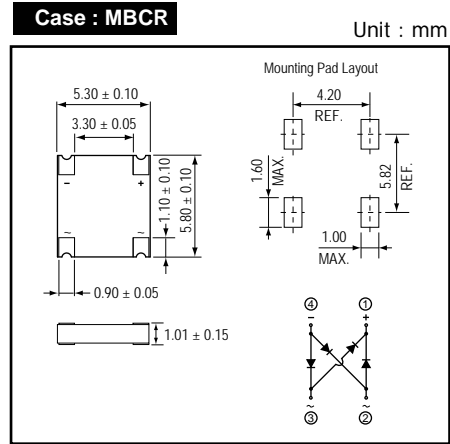
● **MECHANICAL DATA**

Case : Packed with FRP substrate and epoxy underfilled
Terminals : Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.
Polarity : Laser marking symbols
Weight : 0.07 gram

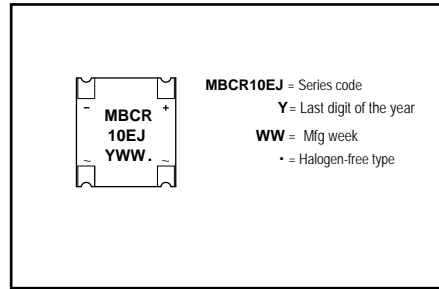
● **PACKING**

- * 5,000 pieces per 13" (330mm ± 2mm) reel
- * 2 reels per box
- * 5 boxes per carton

● **OUTLINE DIMENSIONS**



● **MARKING**



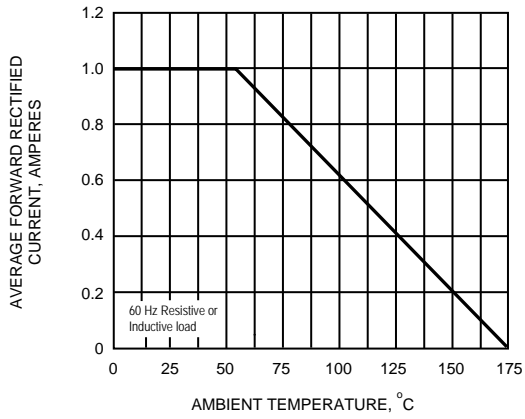
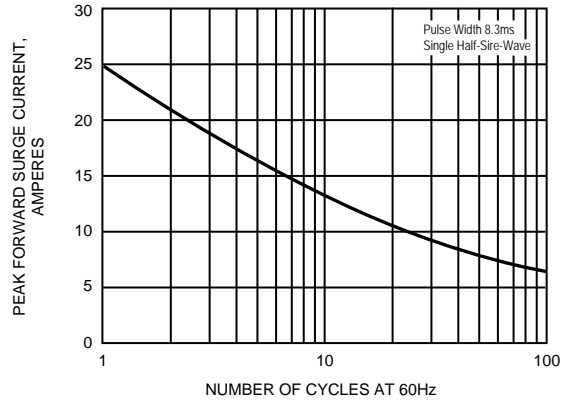
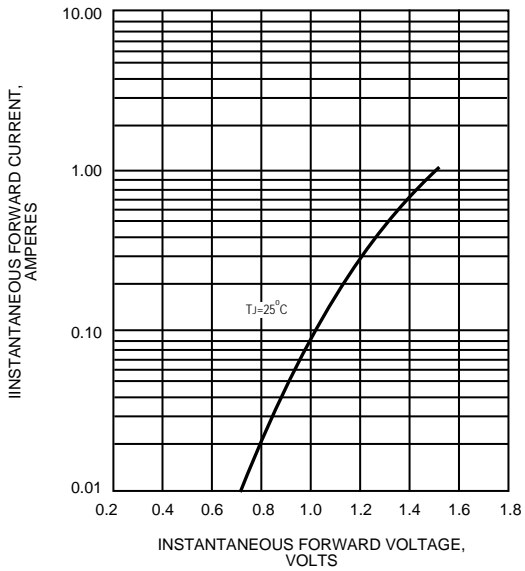
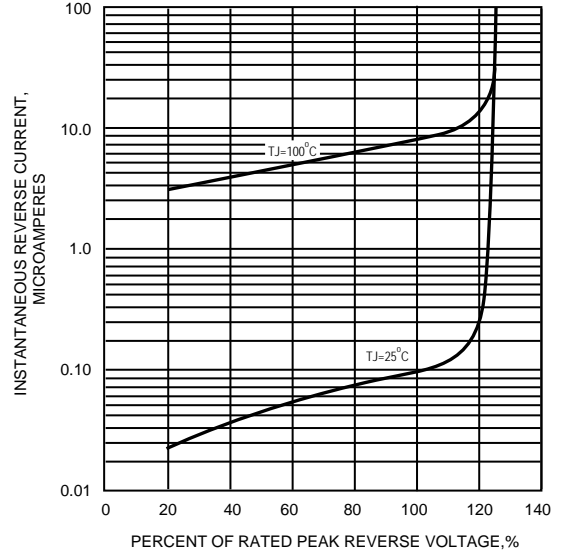
Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V _{RRM}		600	V
Average forward current	I _{F(AV)}		1.0	A
Peak forward surge current	I _{FSM}	8.3ms single half sine-wave	25	A
Reverse recovery time	T _{rr}	I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	75	nS
Operating junction and storage temperature Range	T _j , T _{STG}		-55 to +175	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V _F	I _F = 1.0A	-	1.50	1.70	V
Repetitive peak reverse current	I _{RRM}	V _R = Max. V _{RRM} , Ta = 25 °C	-	0.10	5	uA
Current squared time	I ² t	t < 8.3ms, Ta = 25 °C	-	2.59	-	A ² s
Junction capacitance	C _j	V _R = 4V, f = 1.0 MHz	-	9	-	pF
Thermal resistance	R _{th(JA)}	Junction to ambient (NOTE)	-	110	-	°C/W
	R _{th(JL)}	Junction to lead (NOTE)	-	15	-	

NOTES : Thermal resistance, junction to ambient, measured on PC board with 5.0 x 5.0mm (0.03mm thick) land areas.

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
