

MBCR10YH

● FEATURES

- * Halogen-free type
- * Internal structure with GPRC (glass passivated rectifier chip) inside
- * Compliance to RoHS product
- * Leadless 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

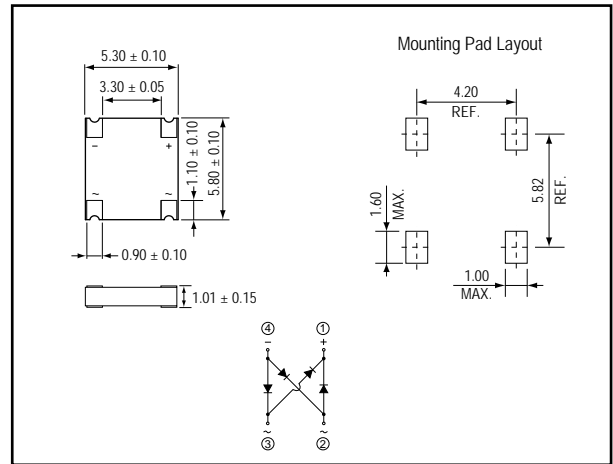
● PACKING

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

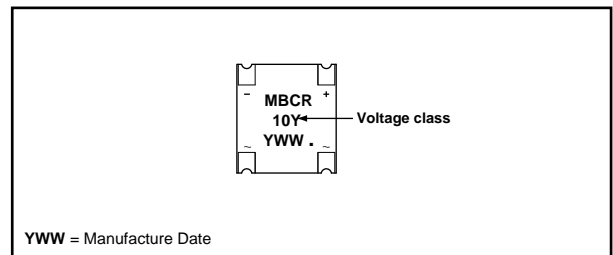
● OUTLINE DIMENSIONS

Case : MBCR

Unit : mm



● MARKING



Absolute Maximum Ratings (Ta = 25 °C)

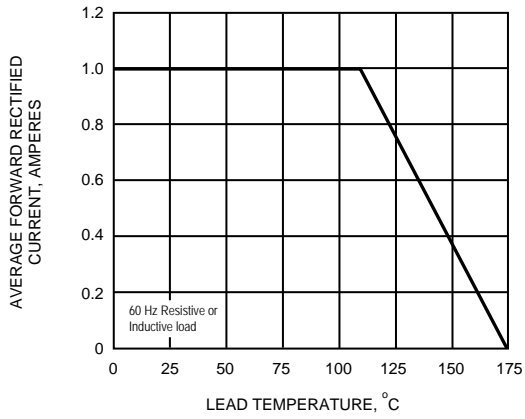
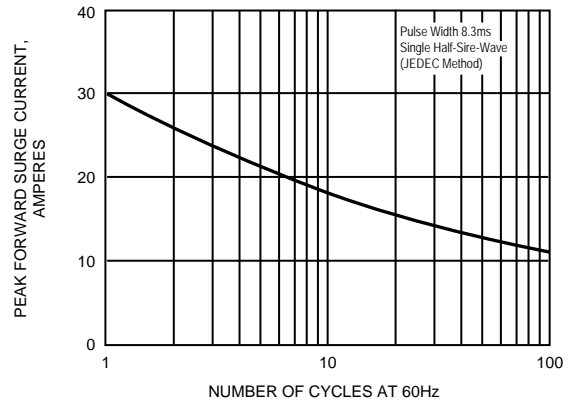
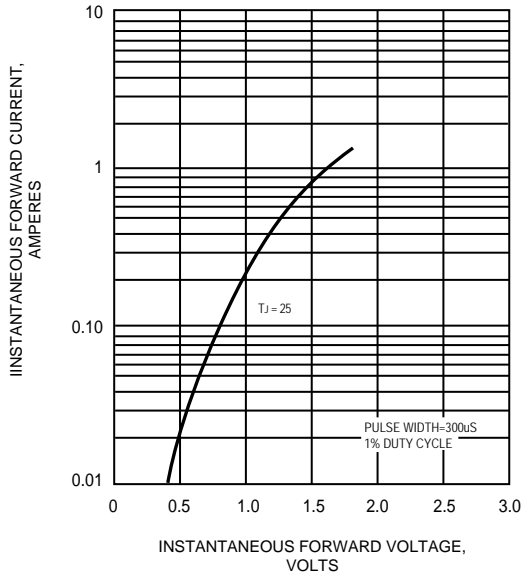
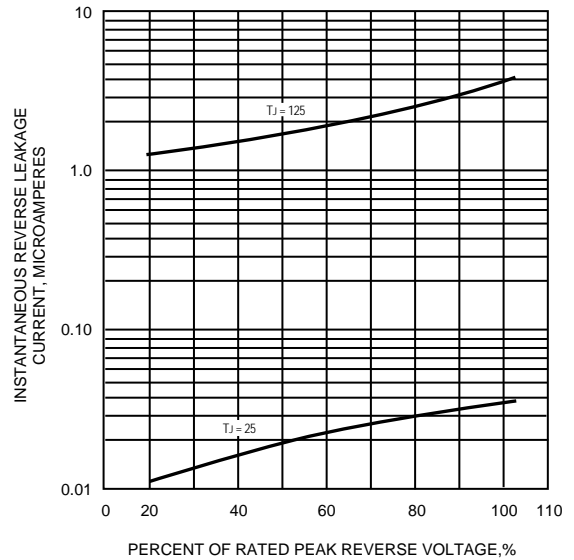
ITEM	Symbol	Rating	Unit
Repetitive peak reverse voltage	VRRM	1600	V
Average forward current	IF(AV)	1.0	A
Peak forward surge current (8.3ms single half sine-wave)	IFSM	30	A
Operating junction and storage temperature Range	Tj, TSTG	-55 to +175	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Value	Unit
Maximum instantaneous forward voltage	VF	IF = 1.0A	1.8	V
Maximum DC reverse current at rated DC blocking voltage	IRRM	VR = Max. VRRM , Ta = 25 °C	5	uA
Typical current squared time	I ² t	t < 8.3ms , Ta = 25 °C	3.74	A ² s
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	25	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 1)	75	°C/W
	Rth(JA)	Junction to ambient (NOTE 2)	95	
	Rth(JL)	Junction to lead (NOTE 2)	20	

NOTES : (1) Thermal resistance, junction to ambient, measured on PC board with 15 x 15mm land areas.

(2) Thermal resistance, junction to ambient, measured on PC board with 5.0 x 5.0mm 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

FIG.5 - TYPICAL JUNCTION CAPACITANCE
