

Preliminary

SMBCM104LH

Low VF Schottky Bridge Rectifier

● FEATURES

- * Halogen-free type
- * Lead free product, compliance to RoHS
- * 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

- * Suitable for battery - powered circuits
- * Communication Equipment

● MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled

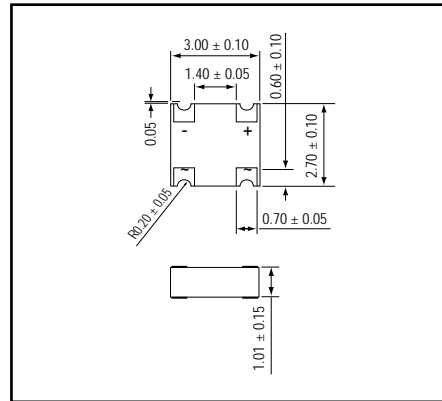
Terminals : Pure Tin plated (Lead-Free),
solderable per MIL-STD-750, Method 2026.

Polarity : Laser Cathode band marking

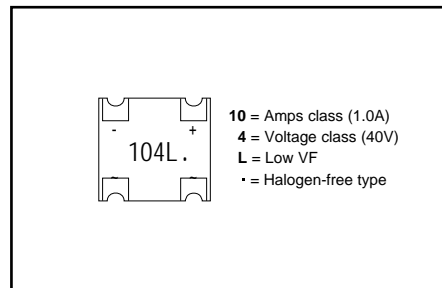
● OUTLINE DIMENSIONS

Case : MBCM

Unit : mm



● MARKING



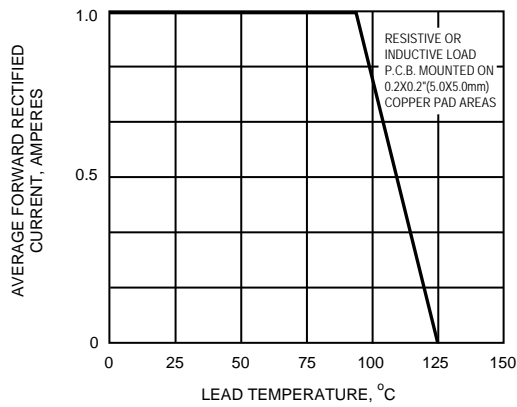
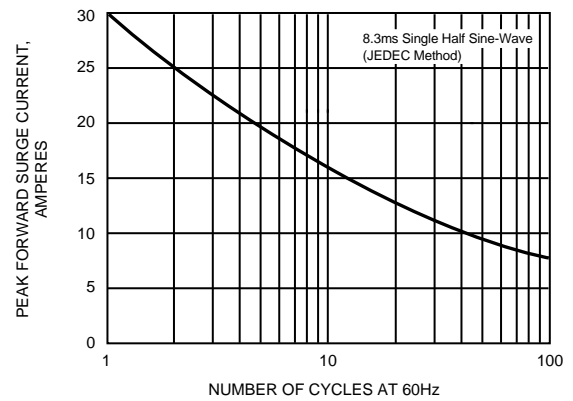
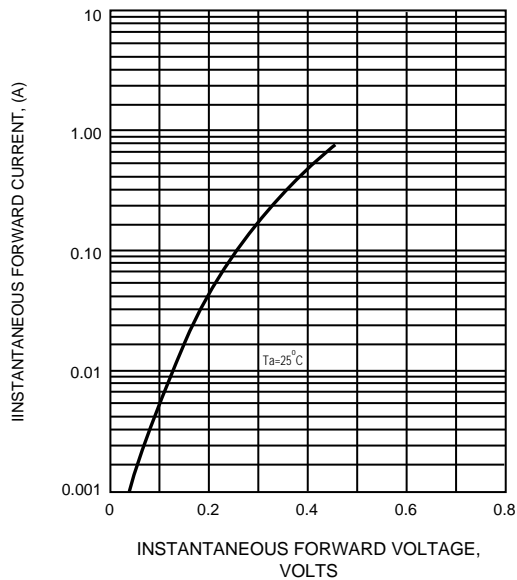
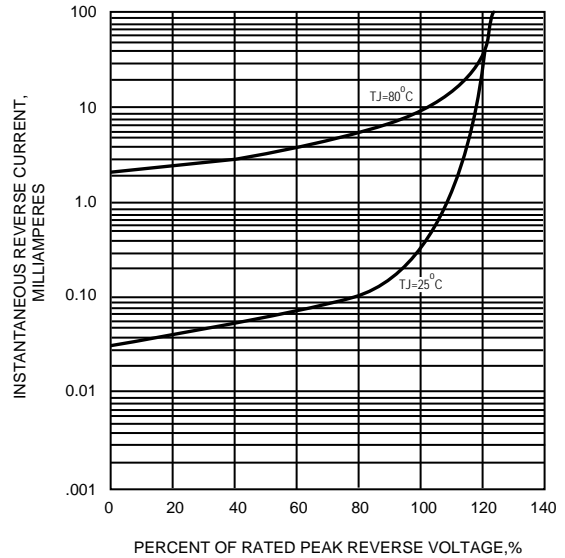
Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
			SMBCM104LH	
Repetitive peak reverse voltage	VRRM		40	V
Average forward current	IF(AV)		1.0	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	30	A
Operating storage temperature Range	Tj,TSTG		-55 to +125	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 0.5A	SMBCM104LH	-	0.37	0.40	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C		-	0.35	1.00	mA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		-	115	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE)		-	110	-	°C/W
	Rth(JL)	Junction to lead (NOTE)		-	15	-	

NOTES : Thermal resistance, junction to ambient, measured on PC board with 5.0mm² (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

FIG.5 - TYPICAL JUNCTION CAPACITANCE
