ZOWIE

Lux-Bridge

(50V~1000V / 1A)

LX10A THRU LX10M

FEATURES

* Halogen-free type
* Glass passivated chip junctions
* 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

* Lighting
* 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.

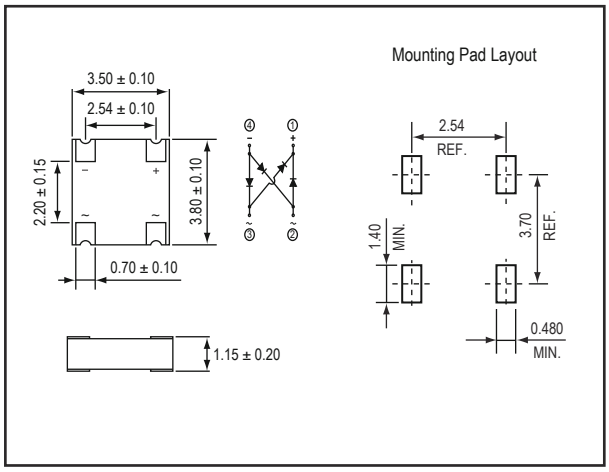
PACKING

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

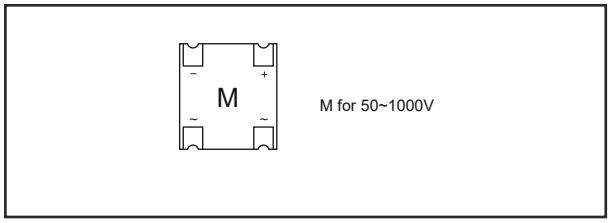
OUTLINE DIMENSIONS

Case : MBCN

Unit : mm



MARKING



Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	LX10							Unit
			A	B	D	G	J	K	M	
Repetitive peak reverse voltage	V_{RRM}		50	100	200	400	600	800	1000	V
Average forward current	$I_{F(AV)}$		1.0							A
Peak forward surge current	I_{FSM}	8.3ms single half sine-wave	30							A
Operating junction and storage temperature Range	T_j,T_{STG}		-55 to +150							°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions		Min.	Typ.	Max.	Unit
Forward voltage	V_F	@I_F = 0.4A		-	0.90	1.0	V
		@I_F = 1.0A		-	-	1.1	
Repetitive peak reverse current	I_{RRM}	V_R = Max. V_{RRM}	Ta = 25 °C	-	0.08	5	uA
			Ta = 125 °C	-	-	100	
Current squared time	I^2t	t < 8.3ms , Ta = 25 °C		-	3.74	-	A^2s
Junction capacitance	C_j	V_R = 4V, f = 1.0 MHz		-	9	-	pF
Typical thermal resistance per leg	$R_{th(JA)}$	Junction to ambient (Note 1)		-	130	-	°C/W
	$R_{th(JC)}$	Junction to case (Note 1)		-	40	-	°C/W

NOTES: (1) On glass epoxy P.C.B. mounted on 0.05" x 0.05" (1.3 x 1.3 mm) solder pads.
(2) Apply the product under 10 Watts

FIG.1 - FORWARD CURRENT DERATING CURVE

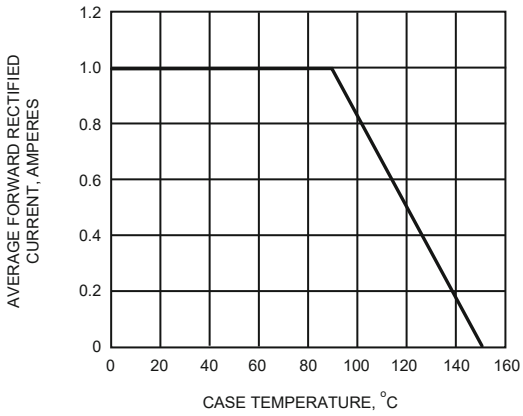


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

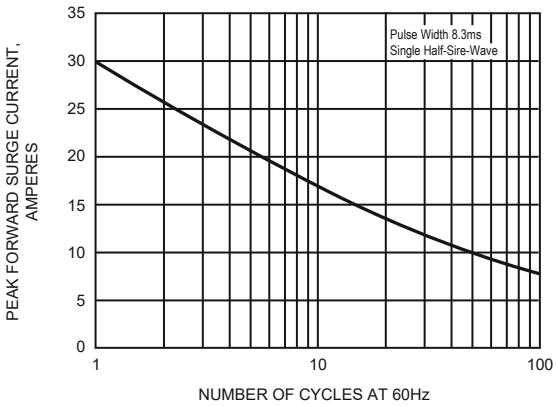


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

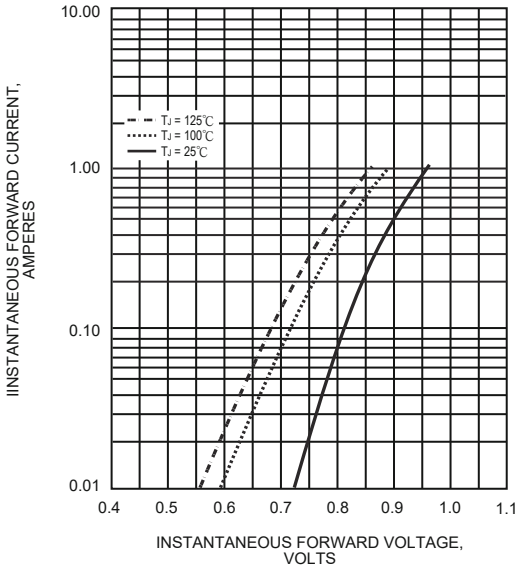


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

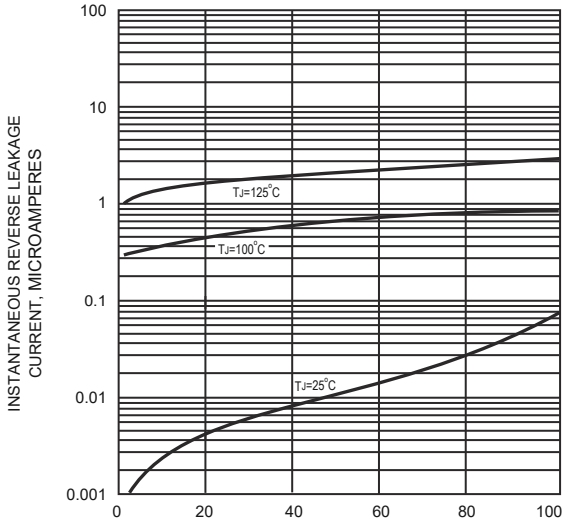


FIG.5 - TYPICAL JUNCTION CAPACITANCE