ZOWIE

High Efficiency Bridge Rectifier

(1000V / 2A)

Z4EGP20MH

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

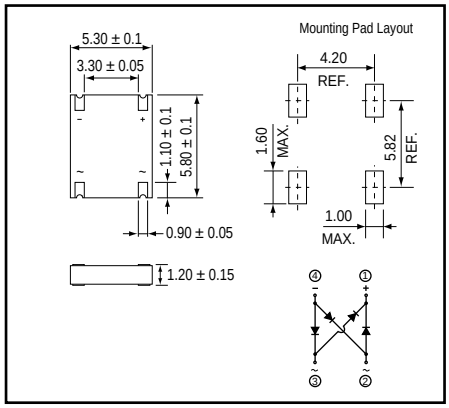
PACKING

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

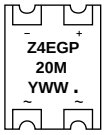
OUTLINE DIMENSIONS

Case : Z4PAK

Unit : mm



MARKING



Z4EGP = Series code
20 = Amps class (2.0A)
M = Voltage class
Y = Last digit of the year
WW = Mfg week
▪ = Halogen-free type

Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		1000	V
Average forward current	$I_{F(AV)}$		2.0	A
Peak forward surge current	I_{FSM}	8.3ms single half sine-wave	50	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}		-65 to +175	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F = 2.0A	-	1.30	1.70	V
Repetitive peak reverse current	I_{RRM}	V_R = Max. V_{RRM} , Ta = 25 °C	-	0.06	5	uA
Current squared time	I^2t	t < 8.3ms , Ta = 25 °C	-	10.4	-	A^2s
Thermal resistance	$R_{th(JA)}$	Junction to ambient (NOTE)	-	125	-	°C/W
	$R_{th(JC)}$	Junction to case (NOTE)	-	45	-	

NOTES : (1) Thermal resistance, measured on PC board with recommended land areas.
(2) Preliminary specification.

FIG.1 - FORWARD CURRENT DERATING CURVE

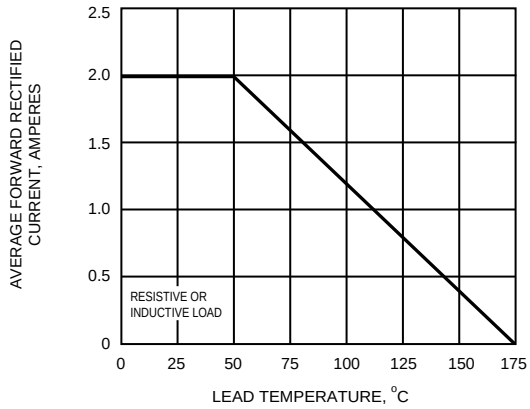


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

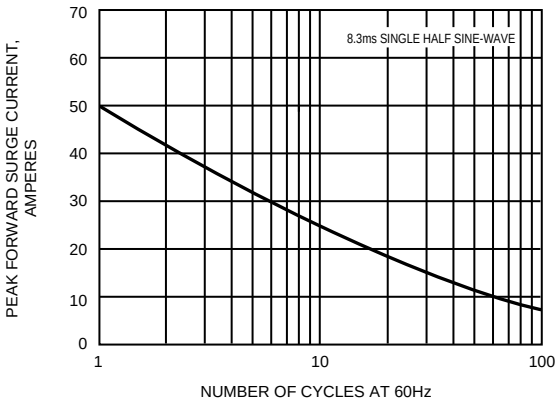


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

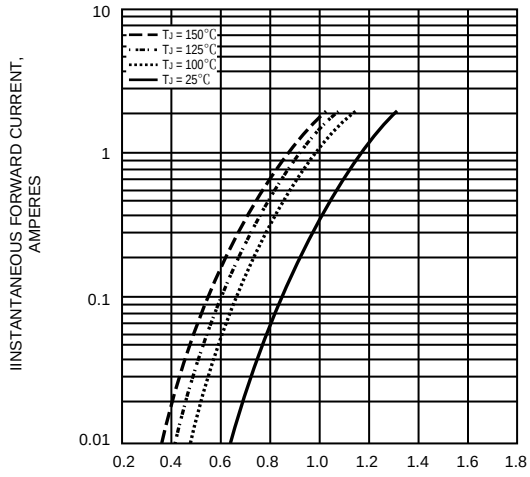


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

