

Z3PK8100H

FEATURES

- * Halogen-free type
- * Lead free product, compliance to RoHS
- * Lead less chip form, no lead damage
- * Low power loss, High efficiency
- * High current capability, low VF
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Patented ZPAK™ Package Technology

APPLICATION

- * Switching mode power supply applications
- * Portable equipment battery applications
- * High frequency rectification
- * DC / DC Converter
- * Designed as bypass diodes for solar panels

MECHANICAL DATA

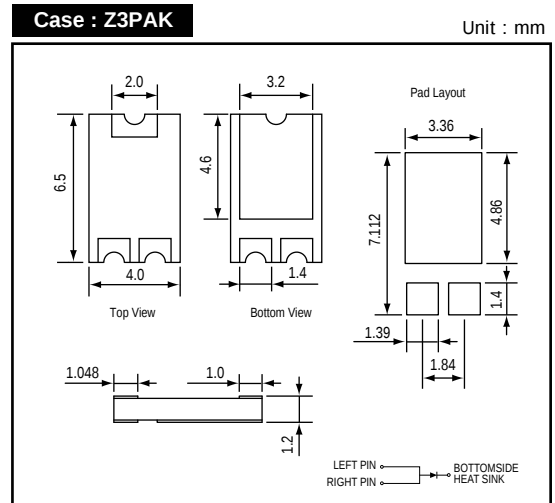
Case : Packed with FRP substrate and epoxy underfilled

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

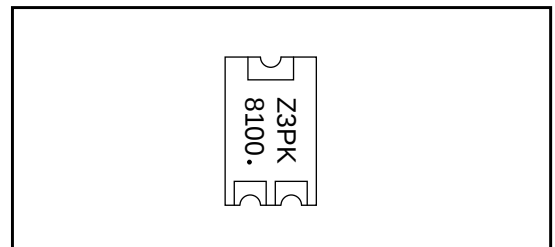
PACKING

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

OUTLINE DIMENSIONS



MARKING



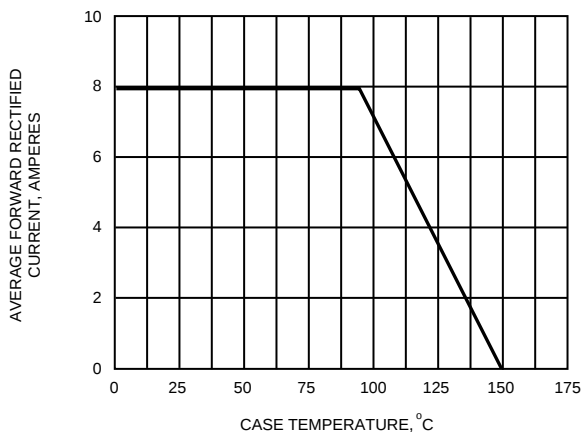
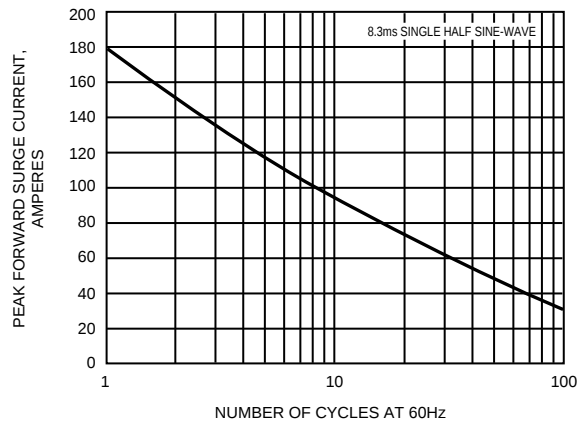
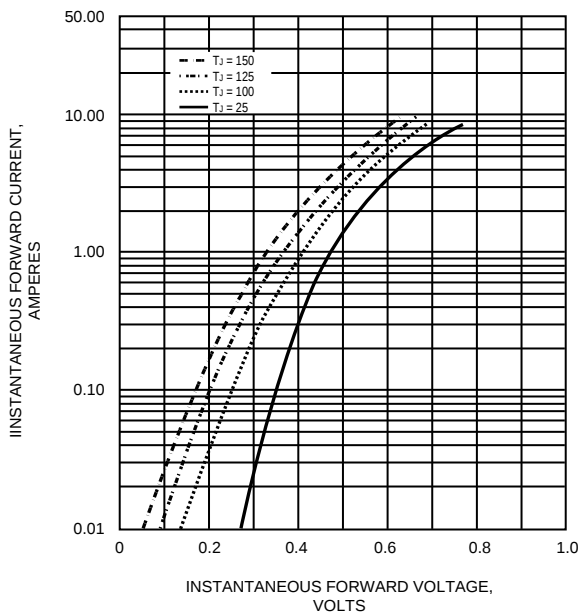
Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
			Z3PK8100H	
Repetitive peak reverse voltage	VRRM		100	V
Average forward current	IF(AV)		8	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	180	A
Operating junction temperature Range	Tj		-55 to +150	°C
Storage temperature Range	TSTG		-55 to +150	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage (NOTE 1)	VF	IF = 8A	-	0.75	0.80	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM Ta = 25 °C	-	0.01	0.10	mA
		Ta = 125 °C	-	-	50	
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 2)	-	60	-	°C/W
	Rth(JL)	Junction to lead (NOTE 2)	-	22	-	°C/W
	Rth(JC)	Junction to case (NOTE 2)	-	20	-	°C/W

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.
(2) Mounted on P.C.B. with 14 x 14mm copper pad areas.
(3) 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
