

Z3PK10100LH

Ultra Low VF = 0.455V at IF = 5A

● **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

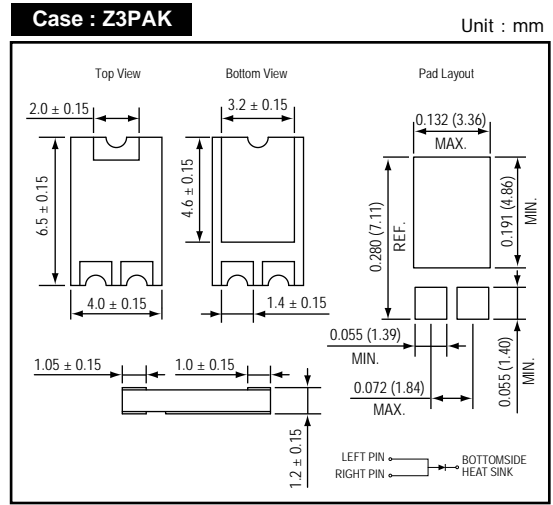
● **MECHANICAL DATA**

Case : Packed with FRP substrate and epoxy underfilled
Terminals : Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.

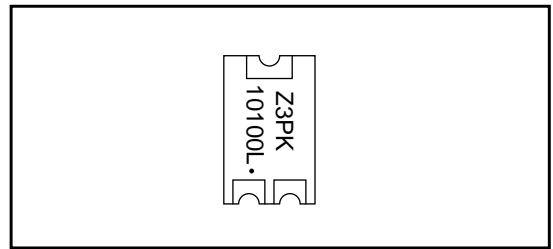
● **PACKING**

- * 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
Repetitive peak reverse voltage	VRRM		100	V
Average forward current	IF(AV)		10	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	VF	@ IF = 5A	Ta = 25 °C	-	0.515	-	V
			Ta = 125 °C	-	0.455	-	
		@ IF = 10A	Ta = 25 °C	-	0.63	0.68	V
			Ta = 125 °C	-	0.57	0.62	
Repetitive peak reverse current	IRRM	@ VR = 70V	Ta = 25 °C	-	0.01	-	mA
			Ta = 125 °C	-	6	-	
		@ VR = Max. VRRM	Ta = 25 °C	-	0.03	0.15	mA
			Ta = 125 °C	-	-	30	
Thermal resistance	Rth(JA)	Junction to ambient (NOTE)	-	105.5	-	°C/W	
	Rth(JC)	Junction to case (NOTE)	-	3.9	-	°C/W	

NOTES : Mounted on P.C.B. with 3.36 x 14.86mm & 1.39 x 1.40mm copper pad areas.

FIG.1 - FORWARD CURRENT DERATING CURVE

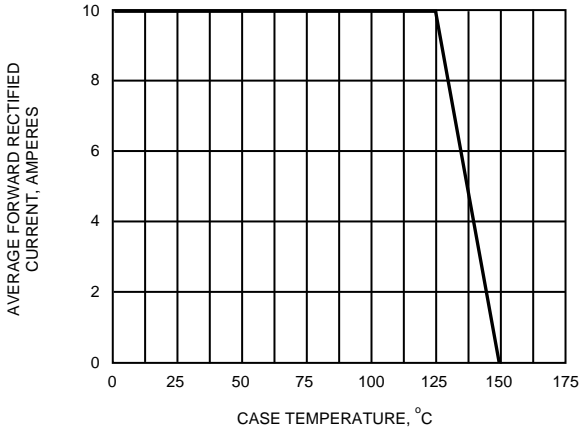


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

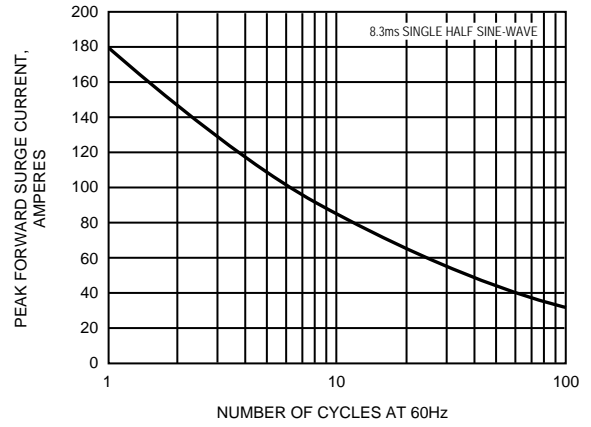


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

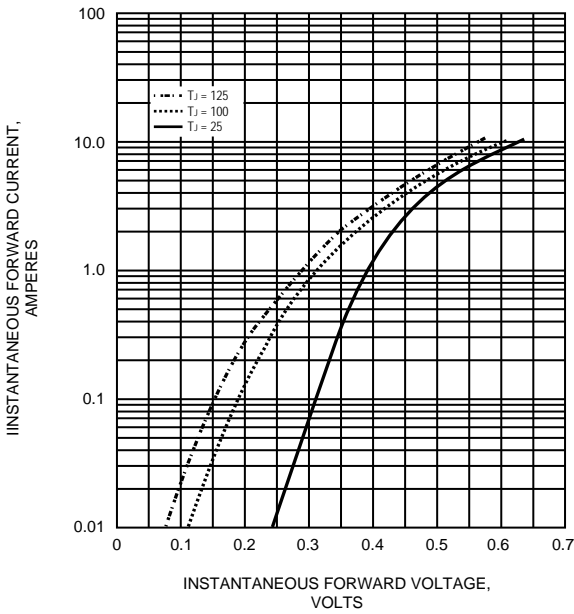


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

