

**Z3PK12100LH**

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

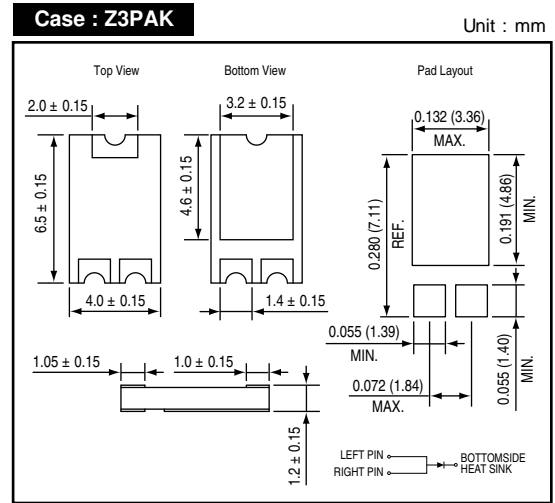
● **MECHANICAL DATA**

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

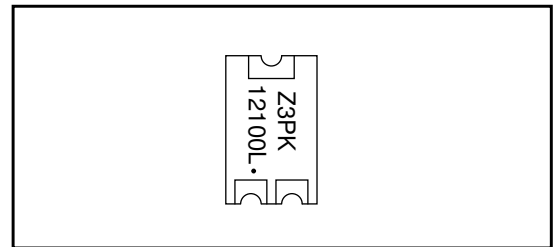
● **PACKING**

- \* 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)		12	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	-	0.515	-	V
		Ta = 25 °C	-	0.455	-	V
		Ta = 125 °C	-	-	-	-
Repetitive peak reverse current	IRRM	@ VR = Max. VRRM	-	0.03	0.15	mA
		Ta = 25 °C	-	-	30	mA
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.