

**Z3PK1045RH**
**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

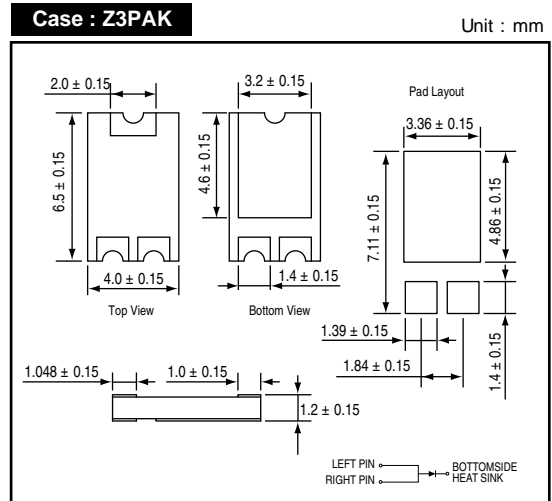
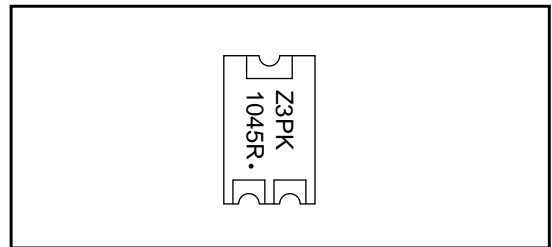
**APPLICATION**

- \* 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.

**OUTLINE DIMENSIONS**

**MARKING**

**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Conditions	Rating	Unit
			<b>Z3PK1045RH</b>	
Repetitive peak reverse voltage	VRRM		45	V
Average forward current	IF(AV)		10	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	300	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 = 0.01A	-	0.18	-	V
		IF = 0.5A	-	0.27	-	
		IF = 2A	-	0.34	-	
		IF = 8A	-	0.42	-	
		IF = 10A	-	0.44	0.47	
Repetitive peak reverse current	IRRM	VR = Max. VRRM Ta = 25 °C	-	-	0.25	mA
		Ta = 100 °C	-	-	15	
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 2)	-	114	-	°C/W
	Rth(JC)	Junction to case (NOTE 2)	-	17	-	°C/W

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.

(2) Mounted on P.C.B. with ( 3.36 x 4.86mm & 1.39 x 1.4mm )copper pad areas.