

## Z3PK20200H

## • 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<sup>™</sup> 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

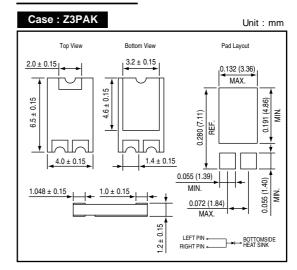
## MECHANICAL DATA

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

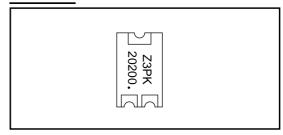
#### PACKING

- 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      |      |
|--------------------------------------|--------|-----------------------------|-------------|------|
|                                      |        |                             | Z3PK20200H  | Unit |
| Repetitive peak reverse voltage      | VRRM   |                             | 200         | V    |
| Average forward current              | lF(AV) |                             | 20          | А    |
| Peak forward surge current           | IFSM   | 8.3ms single half sine-wave | 280         | А    |
| 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. | Тур. | Max. | Unit |
|---------------------------------|---------|------------------------------|------|------|------|------|
| Forward voltage (NOTE 1)        | VF      | IF = 20A                     | -    | 0.83 | 0.93 | V    |
| Repetitive peak reverse current | IRRM    | VR = Max. VRRM, Ta = 25 °C   | -    | 0.02 | 0.10 | mA   |
| 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 |

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

REV. 0 2011/07