

## Z2APK510H

### 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
- \* Telecommunication

### MECHANICAL DATA

**Case :** Packed with FRP substrate and epoxy underfilled

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

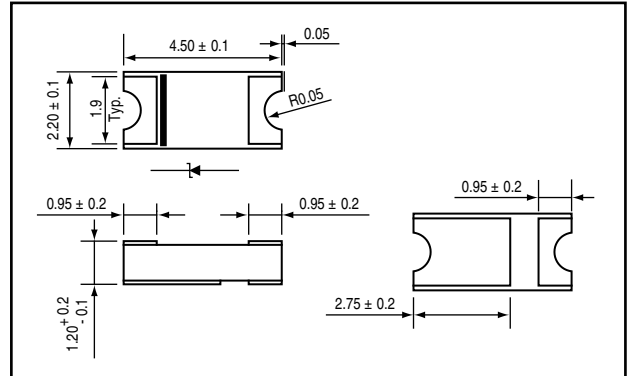
### PACKING

- \* 3,000 pieces per 7" (178mm ± 2mm) reel
- \* 4 reels per box
- \* 6 boxes per carton

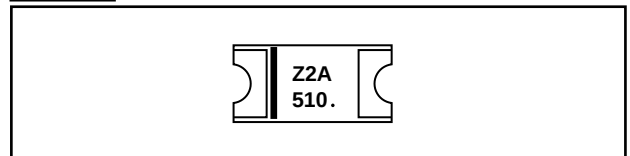
### OUTLINE DIMENSIONS

Case : Z2APAK

Unit : mm

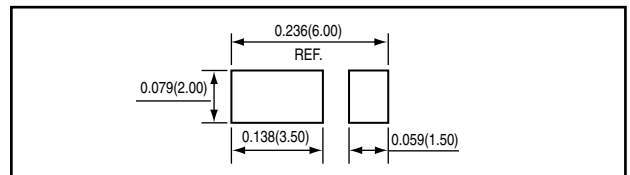


### MARKING



### MOUNTING PAD LAYOUT

Unit : mm



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

| ITEM                                 | Symbol | Conditions                  | Rating      | Unit |
|--------------------------------------|--------|-----------------------------|-------------|------|
| Repetitive peak reverse voltage      | VRRM   |                             | 100         | V    |
| Average forward current              | IF(AV) |                             | 5           | A    |
| Peak forward surge current           | IFSM   | 8.3ms single half sine-wave | 110         | 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 = 5A                      | -    | 0.79 | 0.85 | V    |
| Repetitive peak reverse current | IRRM    | VR = Max. VRRM<br>Ta = 25 °C | -    | 0.01 | 0.20 | mA   |
| Thermal resistance              | Rth(JA) | Junction to ambient (NOTE 2) | -    | 96   | -    | °C/W |
|                                 | Rth(JC) | Junction to case (NOTE 2)    | -    | 23   | -    | °C/W |

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.  
(2) Mounted on P.C.B. with 5.0 x 5.0mm copper pad areas.  
(3) Preliminary specification.