

**Z2APK34H**

● **FEATURES**

- \* Halogen-free type
- \* Compliance to RoHS product
- \* 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

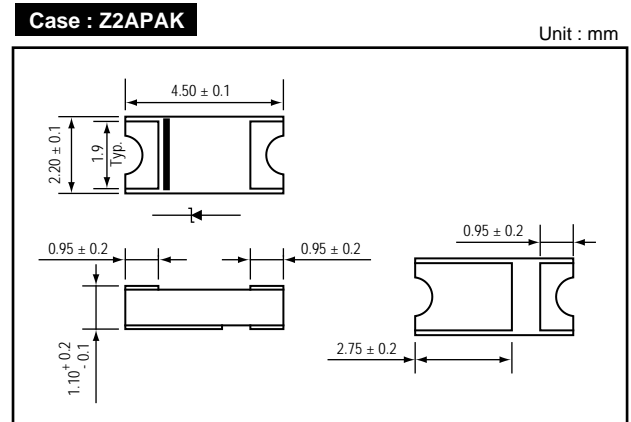
● **MECHANICAL DATA**

**Case :** Packed with FRP substrate and epoxy underfilled  
**Terminals :** Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.  
**Polarity :** Laser Cathode band marking  
**Weight :** 0.027 gram

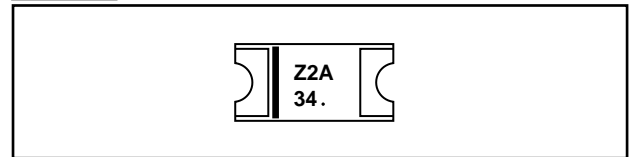
● **PACKING**

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

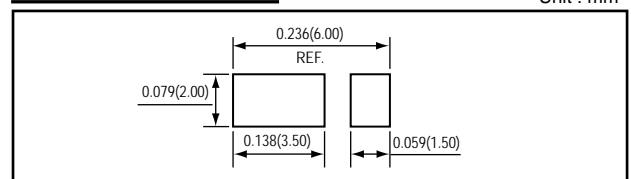
● **OUTLINE DIMENSIONS**



● **MARKING**



● **MOUNTING PAD LAYOUT**



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

| ITEM                                 | Symbol | Conditions                  | Rating      | Unit |
|--------------------------------------|--------|-----------------------------|-------------|------|
|                                      |        |                             | Z2APK34H    |      |
| Repetitive peak reverse voltage      | VRRM   |                             | 40          | V    |
| Average forward current              | IF(AV) |                             | 3.0         | A    |
| Peak forward surge current           | IFSM   | 8.3ms single half sine-wave | 80          | A    |
| Operating junction temperature Range | Tj     |                             | -55 to +125 | °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 = 3.0A                    | -           | 0.46 | 0.50 | V      |    |
| Repetitive peak reverse current (NOTE 1) | IRRM    | VR = Max. VRRM               | Ta = 25 °C  | -    | 0.05 | 0.2    | mA |
|  |         |                              | Ta = 100 °C | -    | -    | 10     |    |
| Junction capacitance                     | Cj      | VR = 4V, f = 1.0 MHz         | -           | 150  | -    | pF     |    |
| Thermal resistance                       | Rth(JA) | Junction to ambient (NOTE 2) | -           | 139  | -    | °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. board with 2.0 x 2.0mm copper pad areas.

FIG.1 - FORWARD CURRENT DERATING CURVE

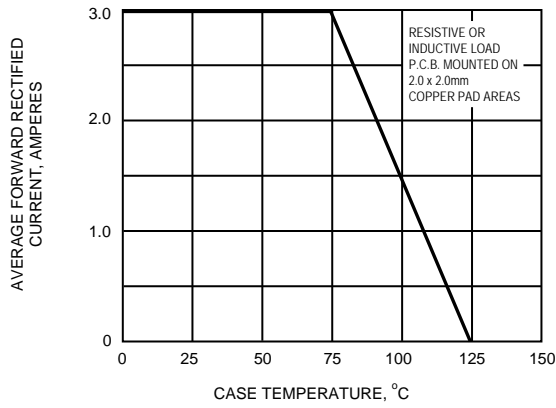


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

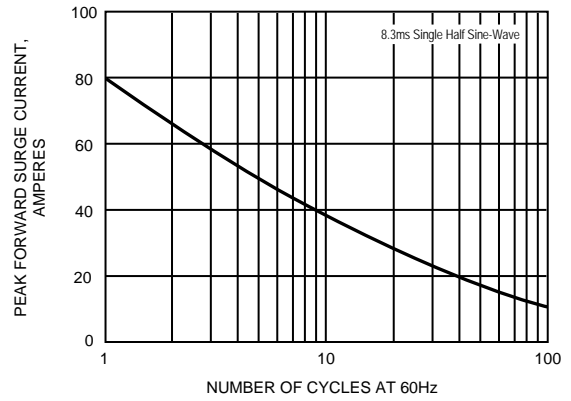


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

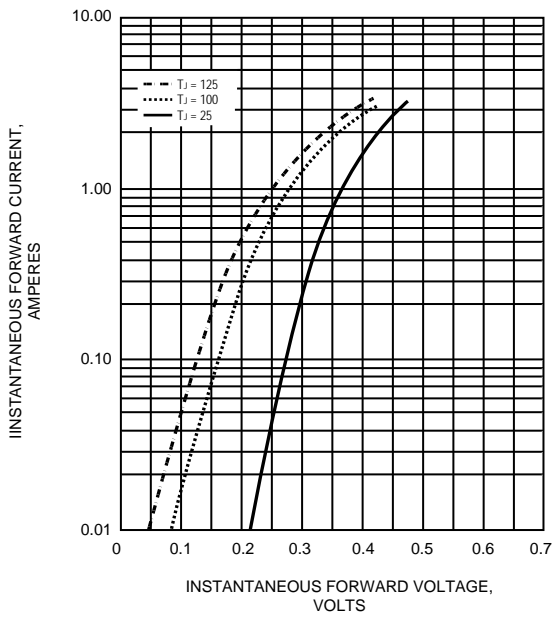


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

