

Z2PK304H
● 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
- * General 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

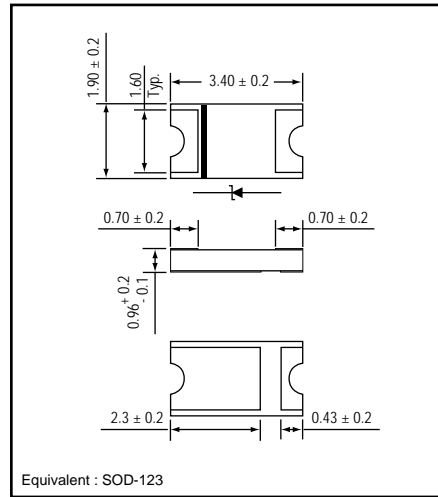
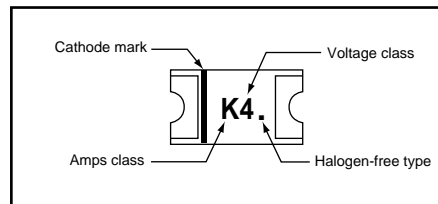
Weight : 0.012 gram

● PACKING

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

● OUTLINE DIMENSIONS
Case : Z2PAK

Unit : mm


● MARKING

Absolute Maximum Ratings (Ta = 25 °C)

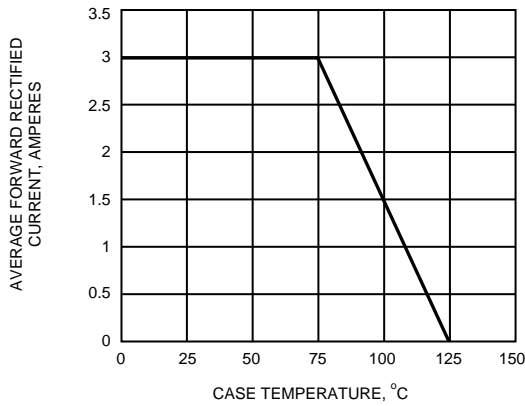
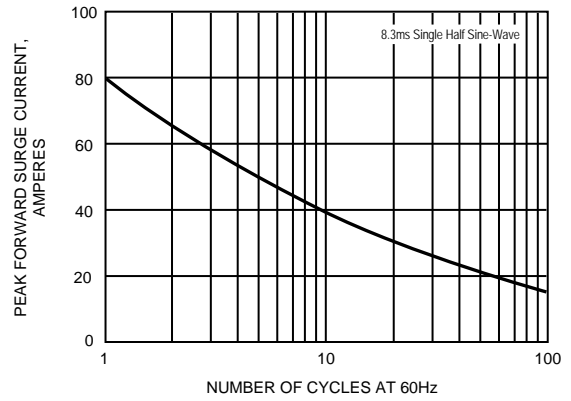
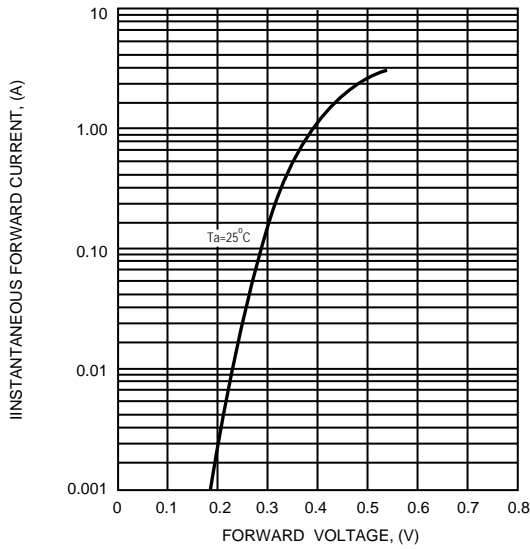
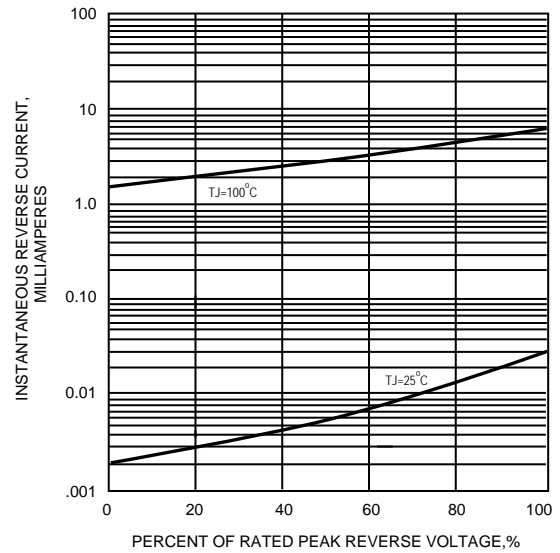
| ITEM | Symbol | Conditions | Rating | Unit |
|--------------------------------------|--------|-----------------------------|-------------|------|
| | | | Z2PK304H | |
| Repetitive peak reverse voltage | VRRM | | 40 | V |
| Average forward current | IF(AV) | | 3.0 | A |
| Peak forward surge current | 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 | - | 0.48 | 0.50 | V |
| Repetitive peak reverse current (NOTE 1) | IRRM | VR = Max. VRRM , Ta = 25 °C | - | 0.03 | 0.2 | mA |
| Junction capacitance | Cj | VR = 4V, f = 1.0 MHz | - | 115 | - | pF |
| Thermal resistance | Rth(JA) | Junction to ambient (NOTE 2) | - | 155 | - | °C / W |
| | Rth(JC) | Junction to case (NOTE 2) | - | 30 | - | °C / W |

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

(2) Mounted on P.C. board with 2.73*1.6mm & 0.86*1.6mm 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

FIG.5 - TYPICAL JUNCTION CAPACITANCE
