

AUSSCD052H AND AUSSCD054H

● 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
- * Comply with AEC-Q101

● APPLICATION

- * Switching mode power supply applications
- * Portable equipment battery applications
- * General rectification
- * DC / DC Converter
- * Telecommunication
- * Automotive

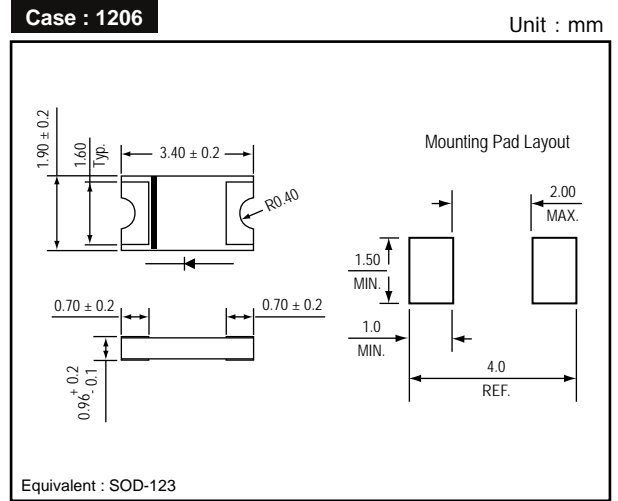
● MECHANICAL DATA

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

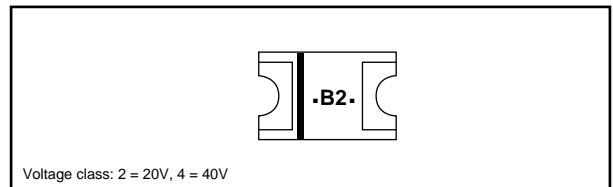
● PACKING

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

● OUTLINE DIMENSIONS



● MARKING



Absolute Maximum Ratings (Ta = 25 °C)

| ITEM | Symbol | Conditions | Rating | | Unit |
|---------------------------------|--------|-----------------------------|-------------|------------|------|
| | | | AUSSCD052H | AUSSCD054H | |
| Repetitive peak reverse voltage | VRRM | | 20 | 40 | V |
| Average forward current | IF(AV) | | 0.5 | | A |
| Peak forward surge current | IFSM | 8.3ms single half sine-wave | 15 | | A |
| Junction temperature | Tj | | 125 | | °C |
| Operating temperature range | Topr | | -40 to 125 | | |
| Storage temperature range | TSTG | | -40 to +125 | | |

Electrical characteristics (Ta = 25 °C)

| ITEM | Symbol | Conditions | Type | Min. | Typ. | Max. | Unit |
|--|---------|-------------------------------------|------------|------|------|--------|------|
| Forward voltage (NOTE 1) | VF | IF = 0.1A IF = 0.3A IF = 0.5A | AUSSCD052H | - | 0.32 | - | V |
| | | | | - | 0.36 | - | |
| | | | | - | 0.40 | 0.42 | |
| | | AUSSCD054H | - | 0.35 | - | | |
| | | | - | 0.40 | - | | |
| | | | - | 0.45 | 0.48 | | |
| Repetitive peak reverse current (NOTE 1) | IRRM | VR = Max. VRRM , Ta = 25 °C | - | 10 | 50 | uA | |
| Junction capacitance | Cj | VR = 4V, f = 1.0 MHz | - | 120 | - | pF | |
| Thermal resistance | Rth(JA) | Junction to ambient (NOTE 2) | - | 88 | - | °C / W | |
| | Rth(JL) | Junction to lead (NOTE 2) | - | 28 | - | °C / W | |

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.
 (2) Mounted on P.C. board with 0.2 x 0.2"(5.0 x5.0mm) copper pad areas.

FIG.1 - FORWARD CURRENT DERATING CURVE

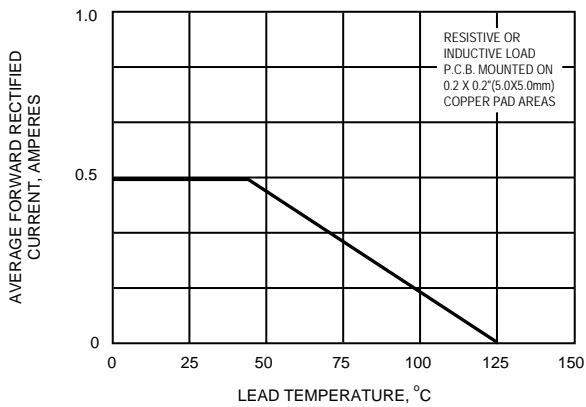


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

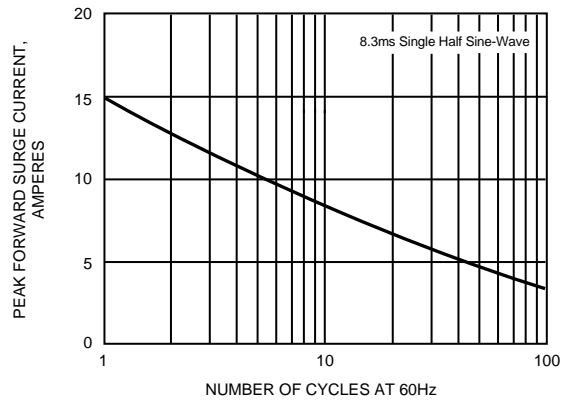


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

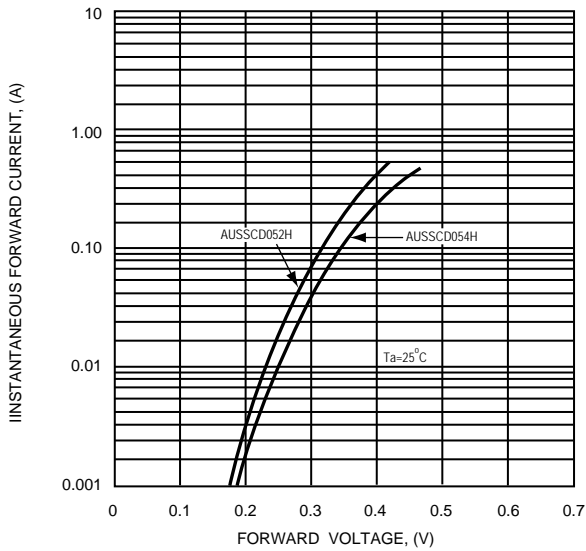


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

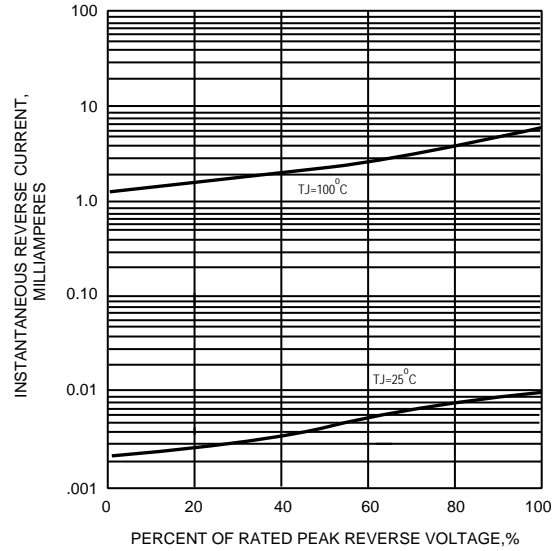


FIG.5 - TYPICAL JUNCTION CAPACITANCE

