

## BSCD26H AND BSCD210H

### 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

### 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** : 0.042 gram

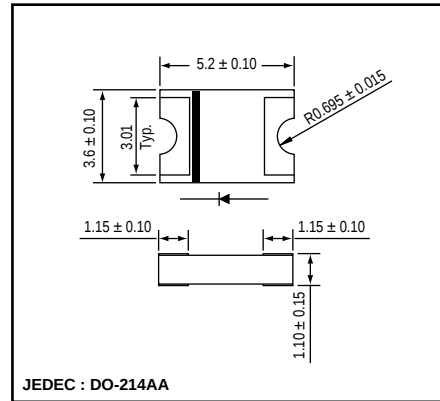
### PACKING

- \* 5,000 pieces per 13" (330mm ± 2mm) reel
- \* 2 reels per box
- \* 5 boxes per carton

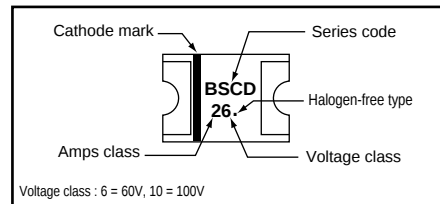
### OUTLINE DIMENSIONS

Case : 2114

Unit : mm



### MARKING



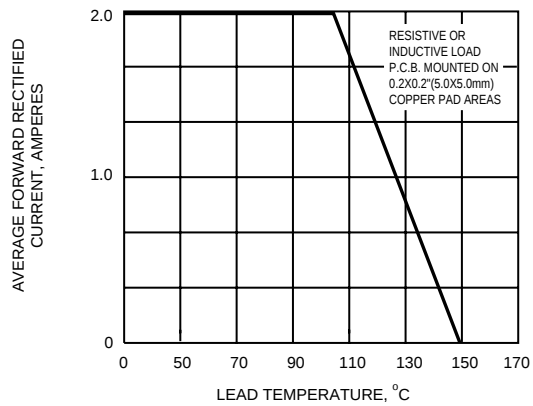
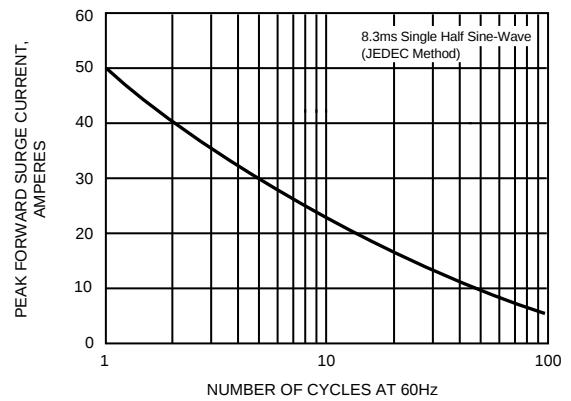
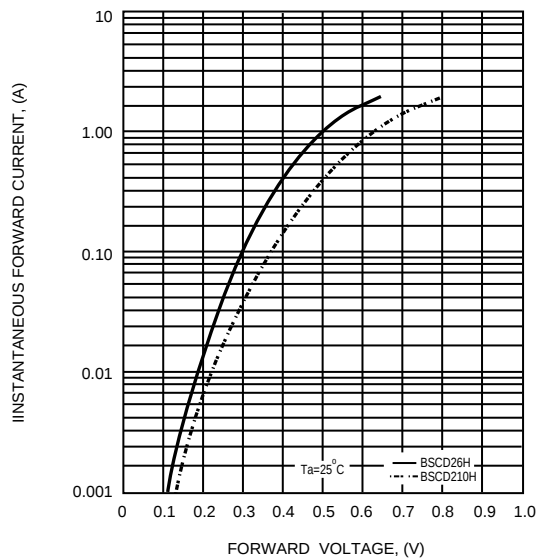
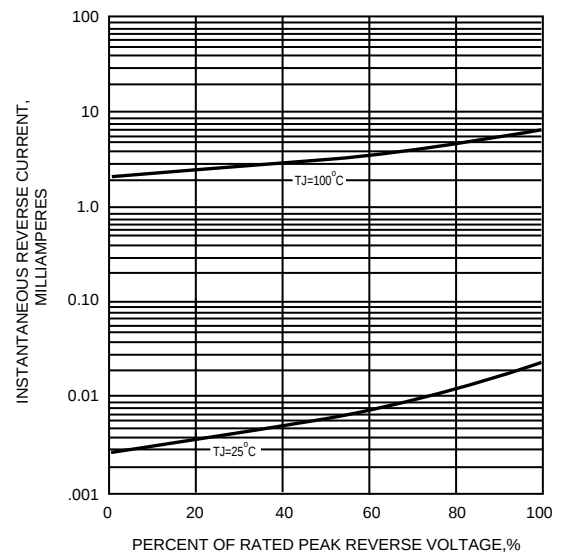
### Absolute Maximum Ratings (Ta = 25 °C)

| ITEM                                 | Symbol | Conditions                  | Rating      |          | Unit |
|--------------------------------------|--------|-----------------------------|-------------|----------|------|
|                                      |        |                             | BSCD26H     | BSCD210H |      |
| Repetitive peak reverse voltage      | VRRM   |                             | 60          | 100      | V    |
| Average forward current (SEE FIG.1)  | IF(AV) |                             | 2.0         |          | A    |
| Peak forward surge current           | IFSM   | 8.3ms single half sine-wave | 50          |          | 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                   | Type     | Min. | Typ.  | Max. | Unit |
|---------------------------------|---------|------------------------------|----------|------|-------|------|------|
| Forward voltage (NOTE 1)        | VF      | IF = 1.0A                    | BSCD26H  | -    | 0.50  | -    | V    |
|                                 |         | IF = 2.0A                    |          | -    | 0.60  | 0.70 |      |
|                                 |         | IF = 1.0A                    | BSCD210H | -    | 0.62  | -    | V    |
|                                 |         | IF = 2.0A                    |          | -    | 0.75  | 0.85 |      |
| Repetitive peak reverse current | IRRM    | VR = Max. VRRM , Ta = 25 °C  |          | -    | 0.025 | 0.20 | mA   |
| Junction capacitance            | Cj      | VR = 4V, f = 1.0 MHz         |          | -    | 115   | -    | pF   |
| Thermal resistance              | Rth(JA) | Junction to ambient (NOTE 2) |          | -    | 65    | -    | °C/W |
|                                 | Rth(JL) | Junction to lead (NOTE 2)    |          | -    | 17    | -    | °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.  
(3) Preliminary draft.

**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**
