

### SCHOTTKY BARRIER DIODE

#### ■ Features

- Low VF
- Super high speed switching.
- High reliability by planer design.

#### ■ Applications

- High speed power switching.

#### ■ Maximum Ratings and Characteristics

##### • Absolute Maximum Ratings

| Item                                  | Symbol           | Conditions                                    | Rating      | Unit |
|---------------------------------------|------------------|---|-------------|------|
| Repetitive peak reverse voltage       | V <sub>RRM</sub> |   | 100         | V    |
| Repetitive peak surge reverse voltage | V <sub>RSM</sub> | t <sub>w</sub> =500ns, duty=1/40              | 100         | V    |
| Isolating voltage                     | V <sub>iso</sub> | Terminals to Case,<br>AC. 1min.               | 1500        | V    |
| Average output current                | I <sub>O</sub>   | duty=1/2, T <sub>c</sub> =80°C<br>Square wave | 30*         | A    |
| Surge current                         | I <sub>FSM</sub> | Sine wave 10ms                                | 180         | A    |
| Operating junction temperature        | T <sub>j</sub>   |   | +150        | °C   |
| Storage temperature                   | T <sub>stg</sub> |   | -40 to +150 | °C   |

\* Out put current of centertap full wave connection.

##### • Electrical Characteristics (Ta=25°C Unless otherwise specified )

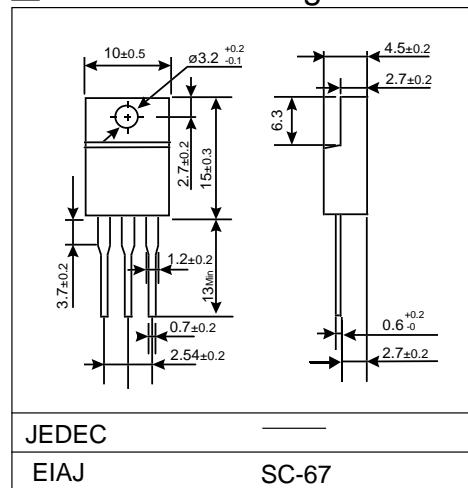
| Item                    | Symbol               | Conditions                       | Max. | Unit |
|-------------------------|----------------------|----------------------------------|------|------|
| Forward voltage drop ** | V <sub>F</sub>       | I <sub>F</sub> =10A              | 0.80 | V    |
| Reverse current **      | I <sub>R</sub>       | V <sub>R</sub> =V <sub>RRM</sub> | 20.0 | mA   |
| Thermal resistance      | R <sub>th(j-c)</sub> | Junction to case                 | 2.0  | °C/W |

\*\* Rating per element

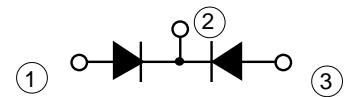
##### • Mechanical Characteristics

|                 |                    |            |       |
|-----------------|--------------------|------------|-------|
| Mounting torque | Recommended torque | 0.3 to 0.5 | N · m |
| Weight          |                    | 2.3        | g     |

#### ■ Outline Drawings



#### ■ Connection Diagram



## ■ Characteristics

