

## Low IR Schottky barrier diode

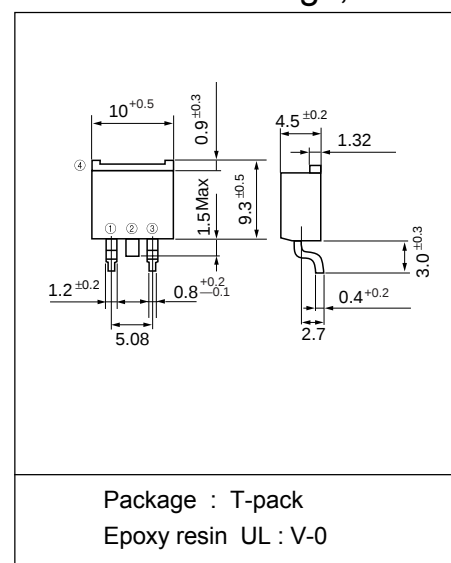
### Features

- Low IR
- Low  $V_F$
- Center tap connection

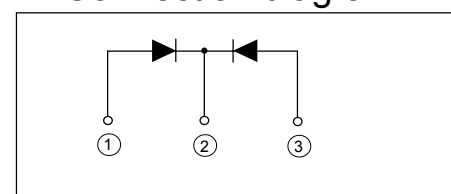
### Applications

- High frequency operation
- DC-DC converters
- AC adapter

### Outline drawings, mm



### Connection diagram



### Maximum ratings and characteristics

#### Maximum ratings

| Item                                           | Symbol    | Conditions                                         | Rating      | Unit               |
|------------------------------------------------|-----------|----------------------------------------------------|-------------|--------------------|
| Repetitive peak surge reverse voltage          | $V_{RSM}$ | tw=500ns, duty=1/40                                | 100         | V                  |
| Repetitive peak reverse voltage                | $V_{RRM}$ |                                                    | 100         | V                  |
| Isolating voltage                              | Viso      | Terminals-to-Case, AC. 1min.                       | 1500        | V                  |
| Average output current                         | $I_o$     | Square wave, duty=1/2<br>$T_c=117^{\circ}\text{C}$ | 20 *        | A                  |
| Non-repetitive surge current                   | $I_{FSM}$ | Sine wave 10ms                                     | 145         | A                  |
| non-repetitive reverse surge power dissipation | PRM       | tw=10μs, $T_j=25^{\circ}\text{C}$                  | 660         | W                  |
| Operating junction temperature                 | $T_j$     |                                                    | +150        | $^{\circ}\text{C}$ |
| Storage temperature                            | $T_{stg}$ |                                                    | -40 to +150 | $^{\circ}\text{C}$ |

\* Out put current of center tap full wave connection

#### Electrical characteristics (at $T_a=25^{\circ}\text{C}$ Unless otherwise specified )

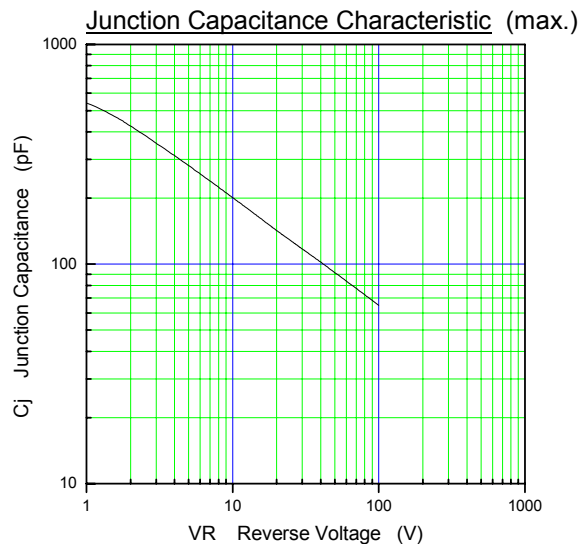
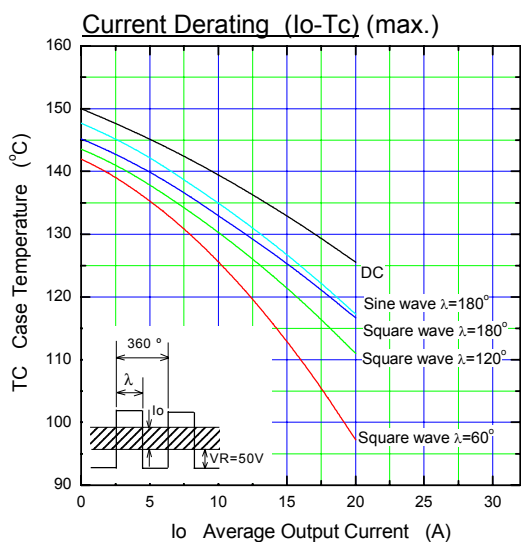
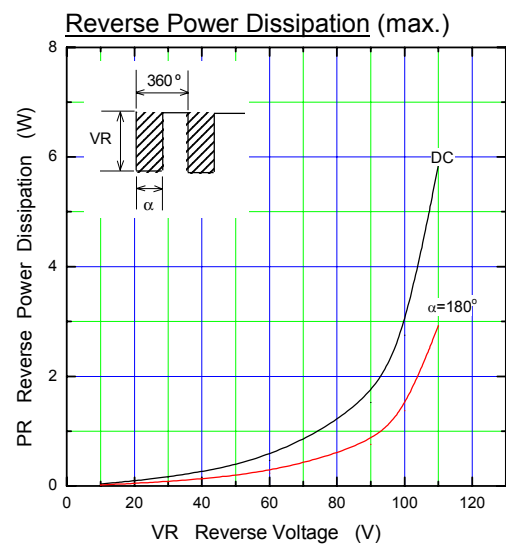
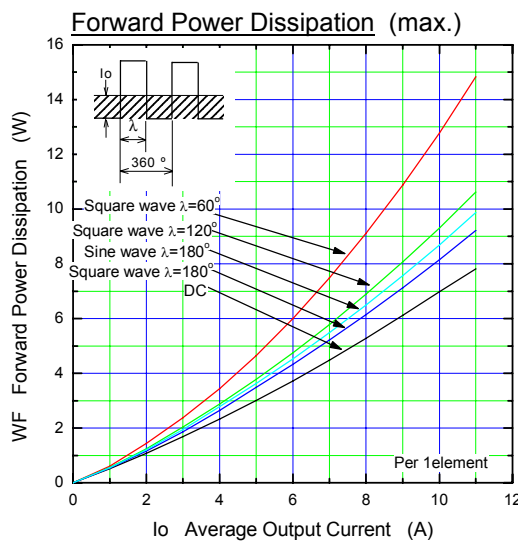
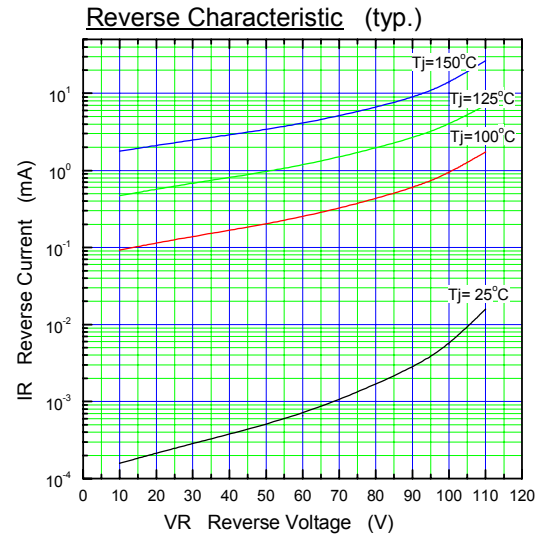
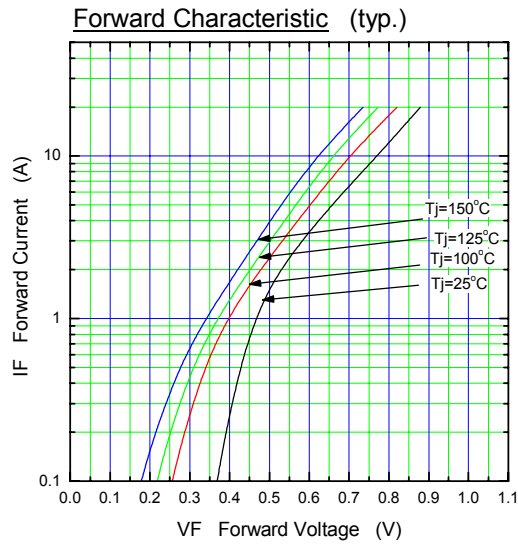
| Item               | Symbol        | Conditions        | Max. | Unit                 |
|--------------------|---------------|-------------------|------|----------------------|
| Forward voltage ** | $V_F$         | $I_F=10\text{A}$  | 0.86 | V                    |
| Reverse current ** | $I_R$         | $V_R=100\text{V}$ | 175  | μA                   |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case  | 1.75 | $^{\circ}\text{C/W}$ |

\*\*Rating per element

#### Mechanical characteristics

|                  |                    |            |     |
|------------------|--------------------|------------|-----|
| Mounting torque  | Recommended torque | 0.3 to 0.5 | N·m |
| Approximate mass |                    | 2          | g   |

■ Characteristics



$\lambda$ : Conduction angle of forward current for each rectifier element  
 $I_o$ : Output current of center-tap full wave connection

