

# YG225C2,N2,D2 (10A)

(200V / 10A)

## FAST RECOVERY DIODE

### Features

- Insulated package by fully molding
- High voltage by mesa design
- High reliability

### Applications

- High speed switching

### Maximum ratings and characteristics

- Absolute maximum ratings

| Item                                | Symbol    | Conditions                               | Rating      | Unit        |
|-------------------------------------|-----------|------------------------------------------|-------------|-------------|
| Repetitive peak reverse voltage     | $V_{RRM}$ |                                          | 200         | V           |
| Non-repetitive peak reverse voltage | $V_{RSM}$ |                                          | 250         | V           |
| Isolating voltage                   | $V_{iso}$ | Terminals-to-Case, AC.1min               | 1500        | V           |
| Average output current              | $I_o$     | Square wave, duty=1/2, $T_c=95^{\circ}C$ | 10*         | A           |
| Surge current                       | $I_{FSM}$ | Sine wave 10ms                           | 70          | A           |
| Operating junction temperature      | $T_j$     |                                          | +150        | $^{\circ}C$ |
| Storage temperature                 | $T_{stg}$ |                                          | -40 to +150 | $^{\circ}C$ |

\*Average forward current of centertap full wave connection

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

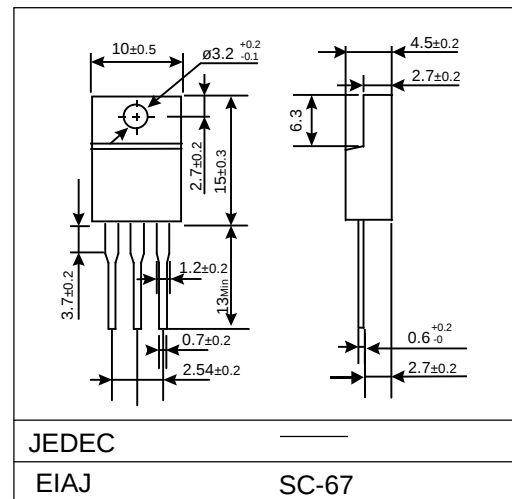
| Item                    | Symbol        | Conditions                                | Max. | Unit          |
|-------------------------|---------------|-------------------------------------------|------|---------------|
| Forward voltage drop ** | $V_{FM}$      | $I_{FM}=2.5A$                             | 1.3  | V             |
| Reverse current **      | $I_{RRM}$     | $V_R=V_{RRM}$                             | 50   | $\mu A$       |
| Reverse recovery time   | $t_{rr}$      | $I_F=0.1A$ , $I_R=0.1A$ , $I_{rec}=0.01A$ | 0.4  | $\mu s$       |
| Thermal resistance      | $R_{th(j-c)}$ | Junction to case                          | 3.5* | $^{\circ}C/W$ |

\*\* Rating per element

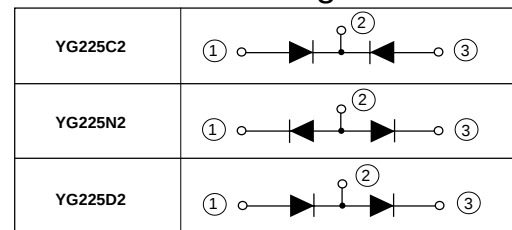
- Mechanical characteristics

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

### Outline drawings, mm

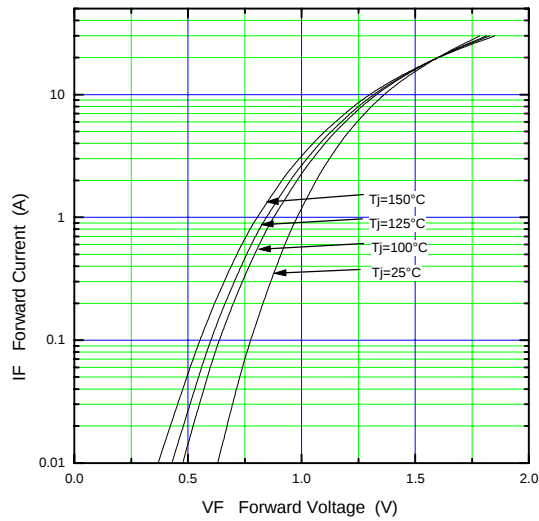


### Connection diagram

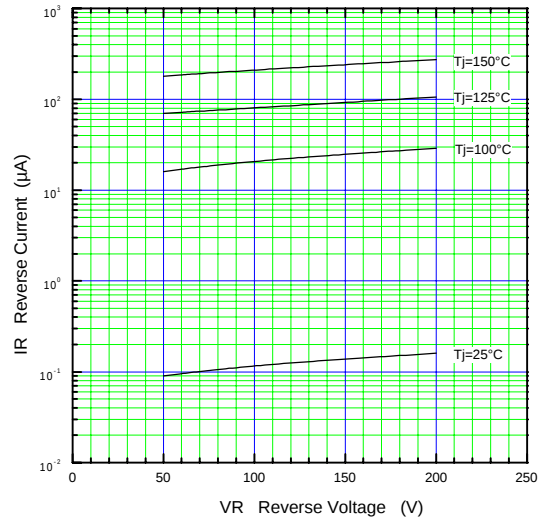


## ■ Characteristics

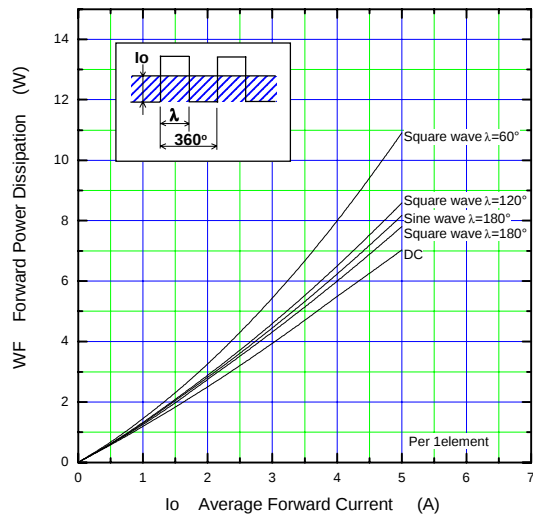
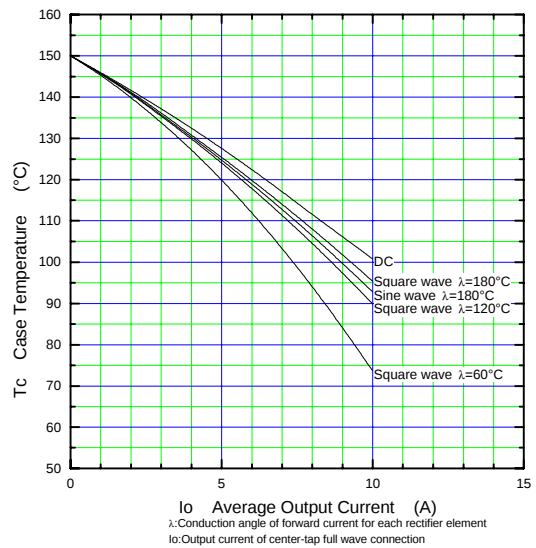
Forward Characteristic (typ.)



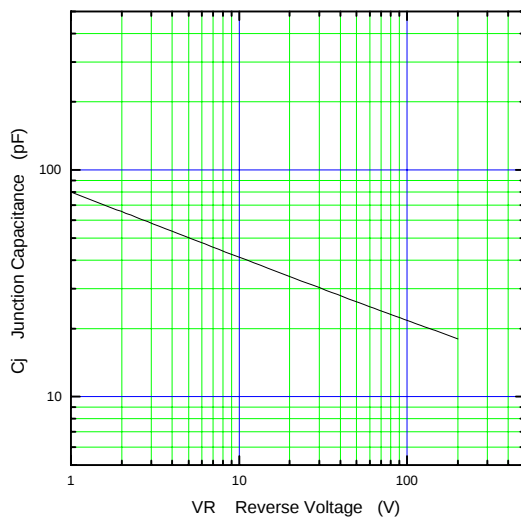
Reverse Characteristic (typ.)



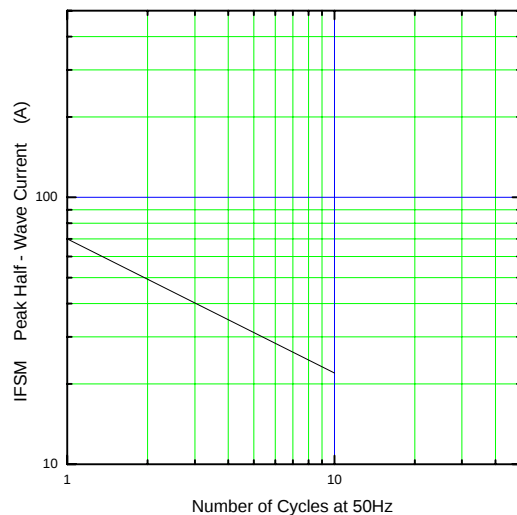
Forward Power Dissipation

Current Derating ( $I_o$ - $T_c$ )

Junction Capacitance Characteristic (typ.)



Surge Capability



Transient Thermal Impedance

