

# ESAD92-02R

FUJI Diode

## Low-Loss Fast Recovery Diode

### ■ Maximum Rating and Characteristics

#### ● Maximum ratings (at Ta=25°C unless otherwise specified.)

| Item                                   | Symbols   | Conditions                               | Ratings     | Units |
|----------------------------------------|-----------|------------------------------------------|-------------|-------|
| Repetitive peak reverse voltage        | $V_{RRM}$ | -                                        | 200         | V     |
| Average output current                 | $I_o$     | 50Hz Square wave duty =1/2<br>Tc = 115°C | 20 *        | A     |
| Non-repetitive forward surge current** | $I_{FSM}$ | Sine wave, 10ms 1shot                    | 100         | A     |
| Operating junction temperature         | $T_j$     | -                                        | 150         | °C    |
| Storage temperature                    | $T_{stg}$ | -                                        | -40 to +150 | °C    |

Note\* Out put current of center tap full wave connection.

Note\*\* Rating per element

#### ● Electrical characteristics (at Ta=25°C unless otherwise specified.)

| Item                     | Symbols       | Conditions                                                     | Maximum | Units |
|--------------------------|---------------|----------------------------------------------------------------|---------|-------|
| Forward voltage***       | $V_F$         | $I_F = 10\text{ A}$                                            | 0.95    | V     |
| Reverse current***       | $I_R$         | $V_R = V_{RRM}$                                                | 200     | μA    |
| Reverse recovery time*** | $t_{rr}$      | $I_F = 0.1\text{A}, I_R = 0.2\text{A}, I_{rec} = 0.05\text{A}$ | 0.04    | μs    |
| Thermal resistance       | $R_{th(j-c)}$ | Junction to case                                               | 1.5     | °C/W  |

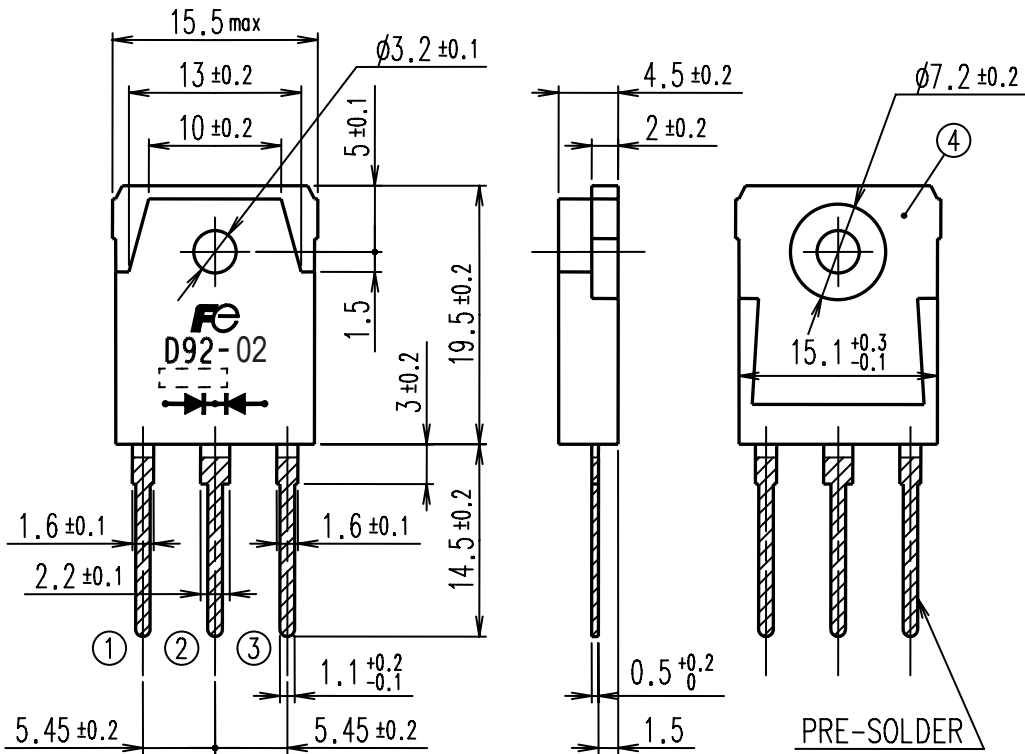
Note\*\*\* Rating per element

#### ● Mechanical characteristics

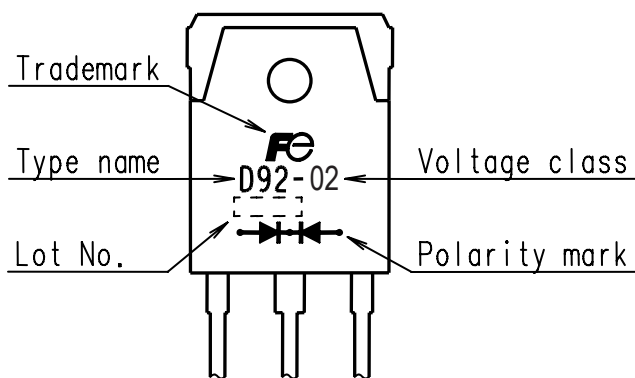
| Item             | Conditions         | Maximum    | Units |
|------------------|--------------------|------------|-------|
| Mounting torque  | Recommended torque | 0.4 to 0.6 | N•m   |
| Approximate mass | -                  | 5.5        | g     |

■ Outline Drawings [mm]

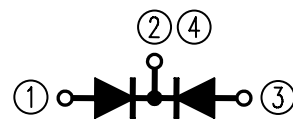
OUT VIEW



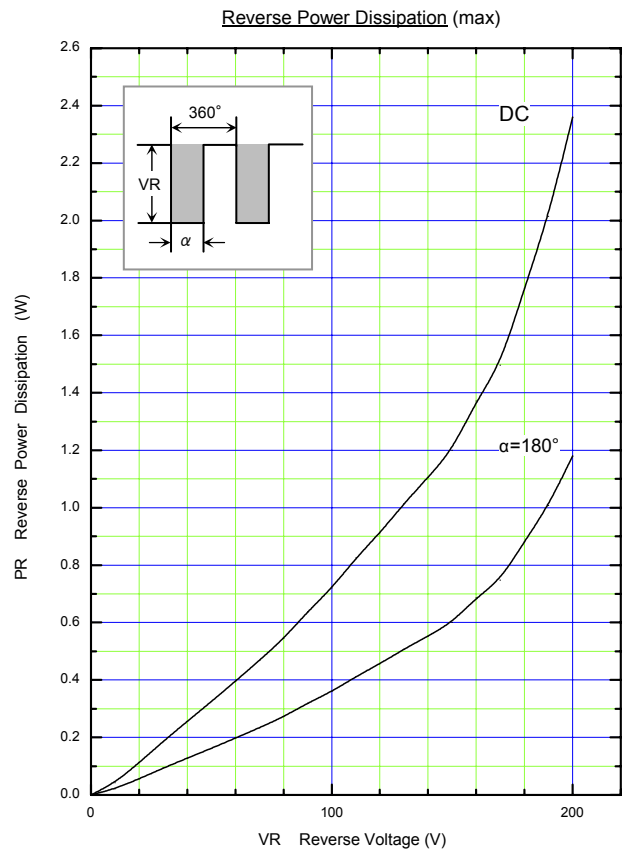
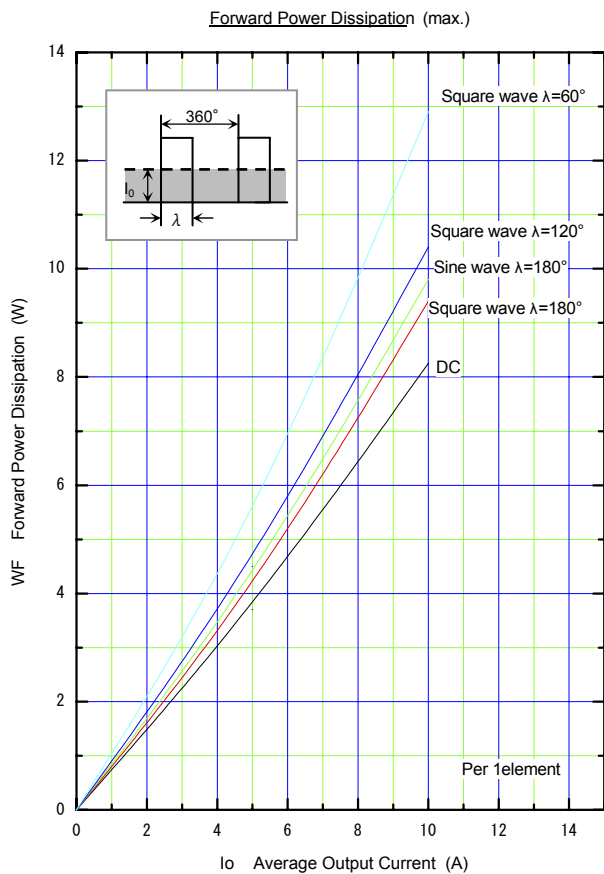
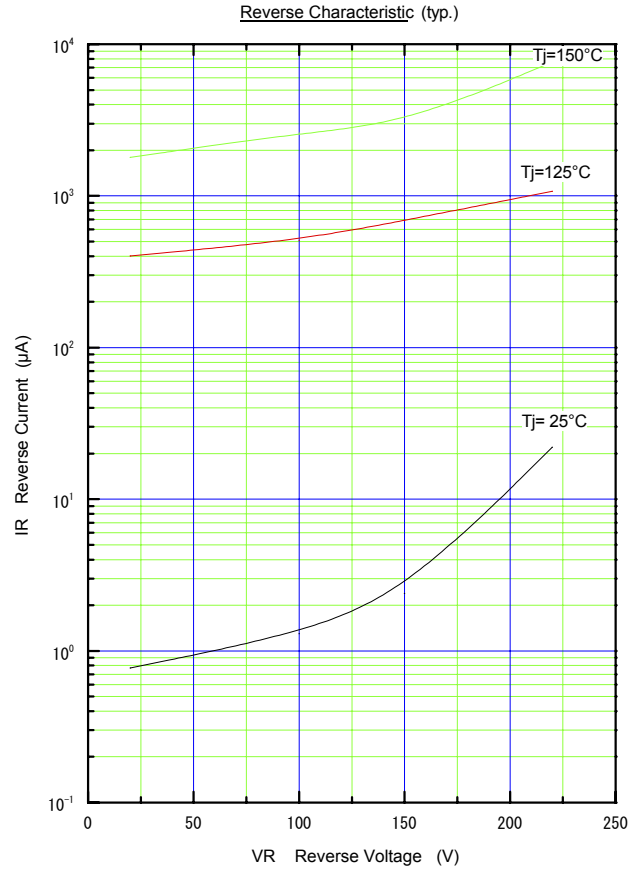
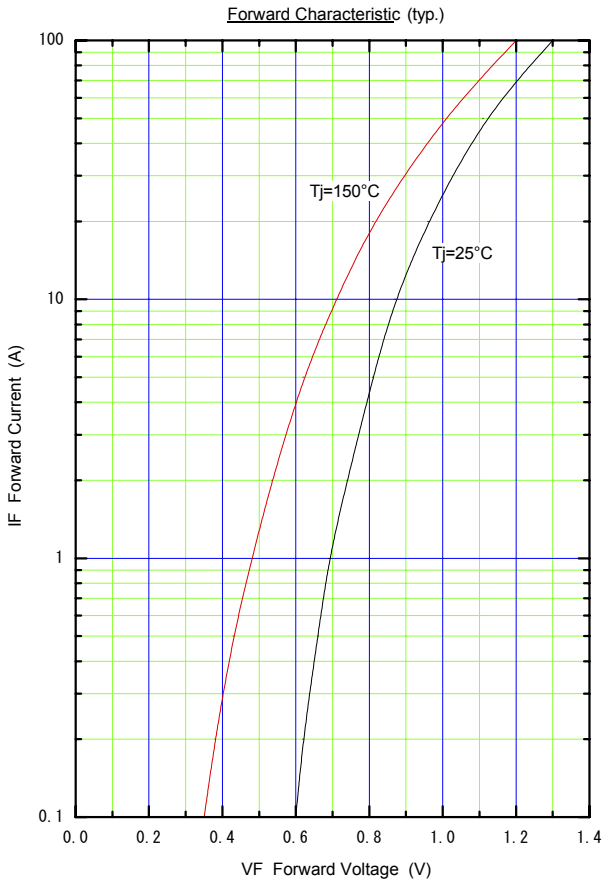
MARKING



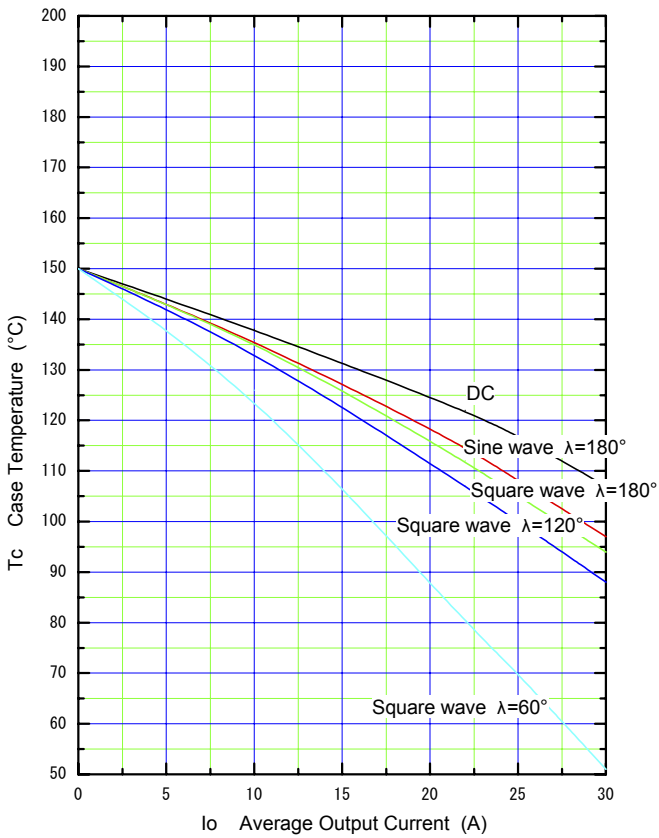
CONNECTION



UNIT : mm

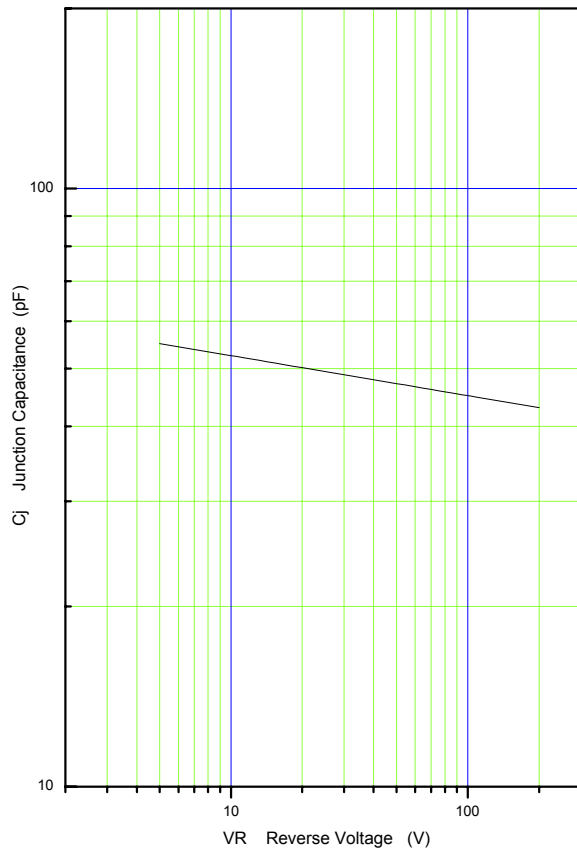


Current Derating (I<sub>o</sub>-T<sub>c</sub>) (max.)

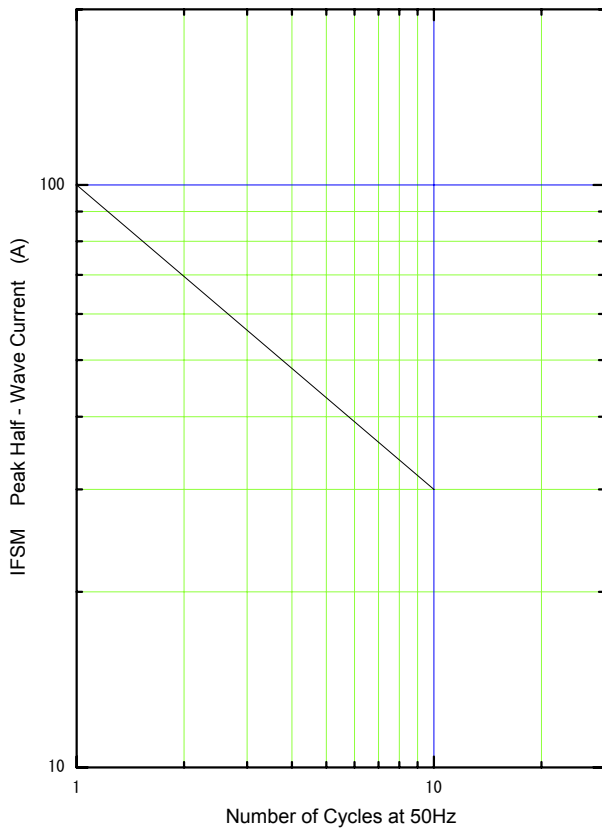


λ: Conduction angle of forward current for each rectifier element  
 I<sub>o</sub>: Output current of center-tap full wave connection

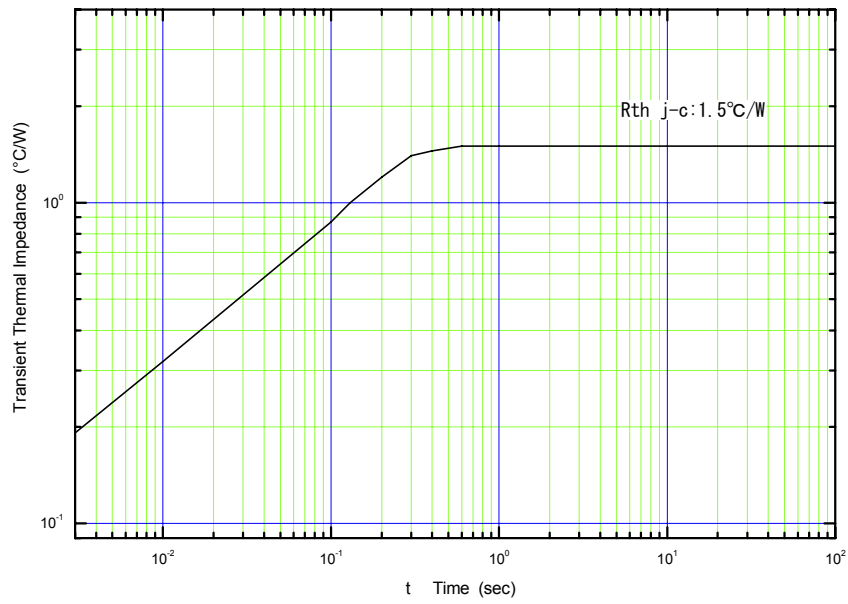
Junction Capacitance Characteristic (typ.)



Surge Capability (max.)



Transient Thermal Impedance (max.)



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