

ESAD83-004R

FUJI Diode

Schottky Barrier Diode

■ Maximum Rating and Characteristics

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

| Item | Symbols | Conditions | Ratings | Units |
|--|-----------|--|-------------|-------|
| Repetitive peak surge reverse voltage | V_{RSM} | tw=500ns, duty=1/40 | 48 | V |
| Repetitive peak reverse voltage | V_{RRM} | - | 40 | V |
| Average output current | I_O | 50Hz Square wave duty =1/2 Tc = 118°C | 30 * | A |
| Non-repetitive forward surge current** | I_{FSM} | Sine wave, 10ms 1shot | 150 | 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.)

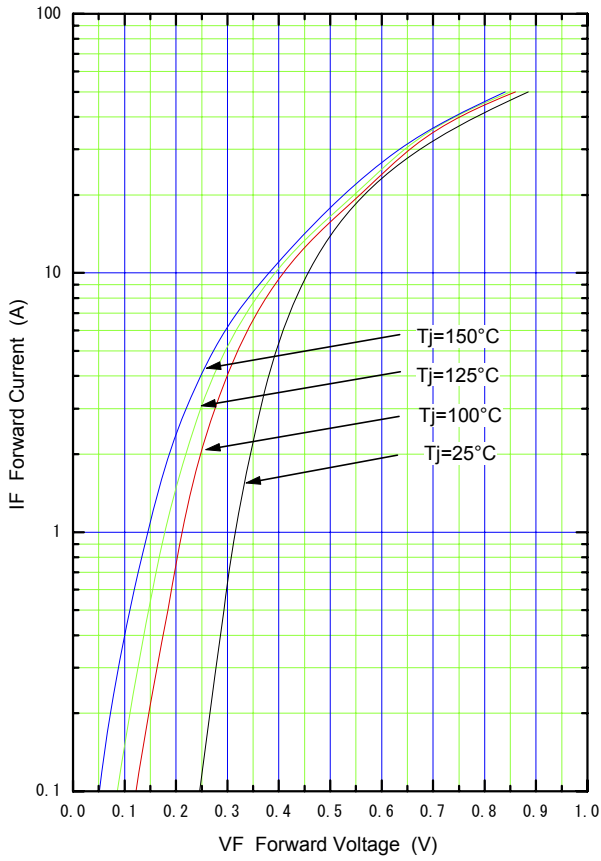
| Item | Symbols | Conditions | Maximum | Units |
|--------------------|---------------|------------------|---------|-------|
| Forward voltage*** | V_F | $I_F = 12.5 A$ | 0.55 | V |
| Reverse current*** | I_R | $V_R = V_{RRM}$ | 20 | mA |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 1.2 | °C/W |

Note*** Rating per element

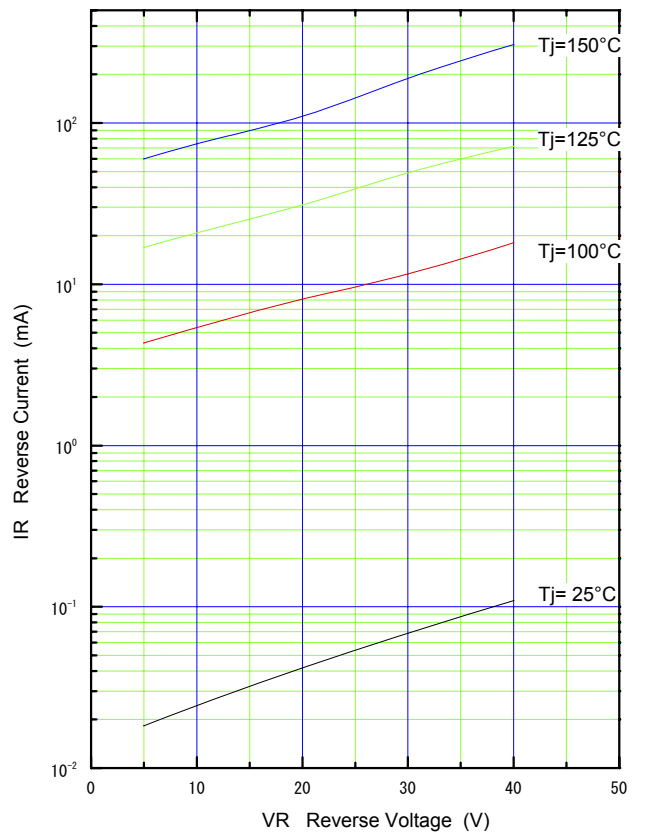
● Mechanical characteristics

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

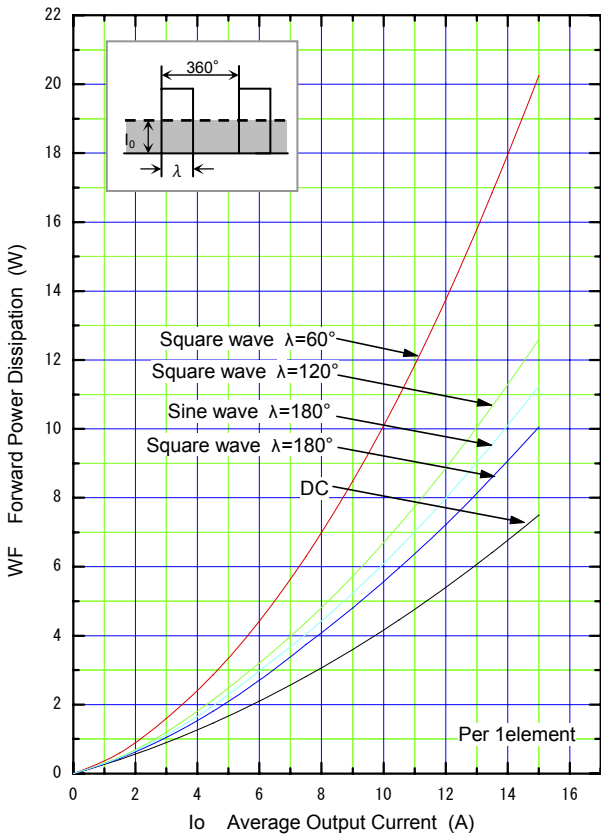
Forward Characteristic (typ.)



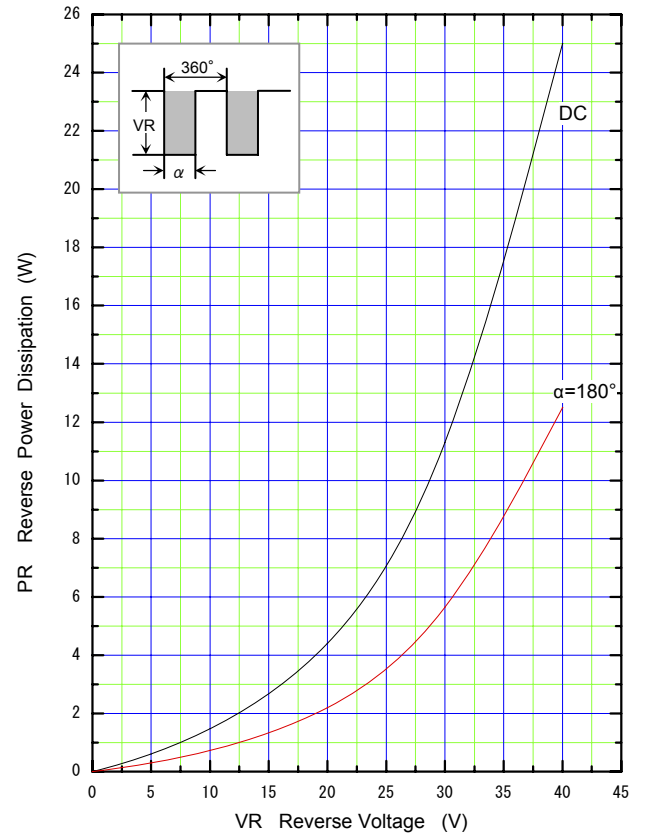
Reverse Characteristic (typ.)



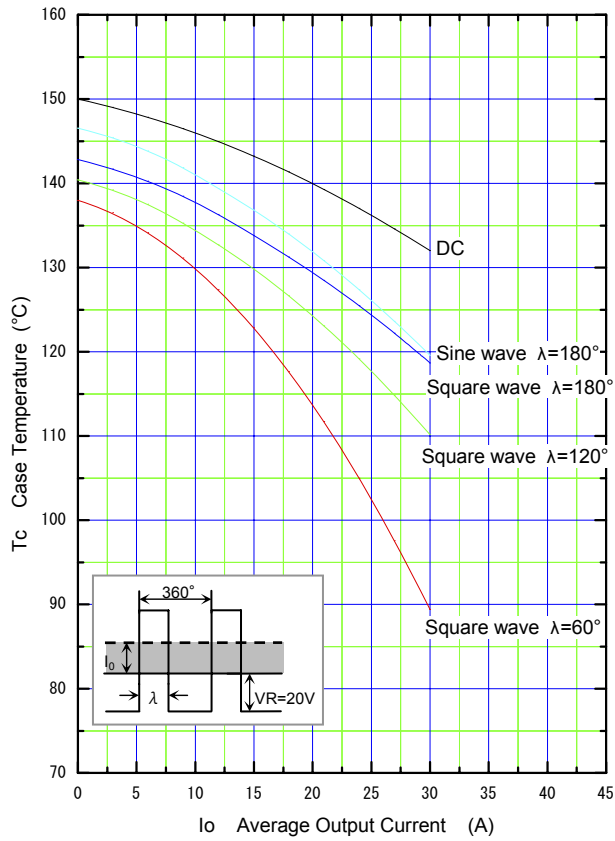
Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)

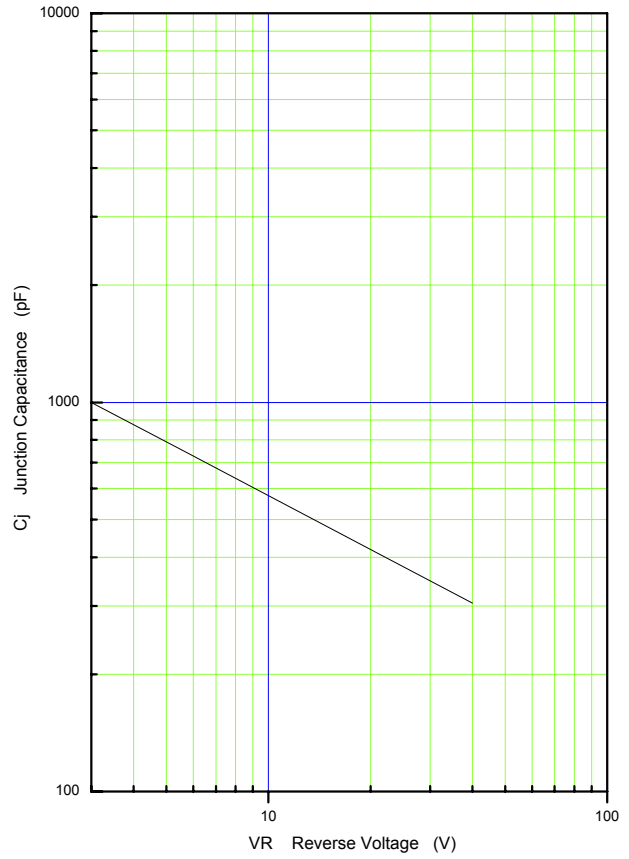


Current Derating (I_o - T_c) (max.)

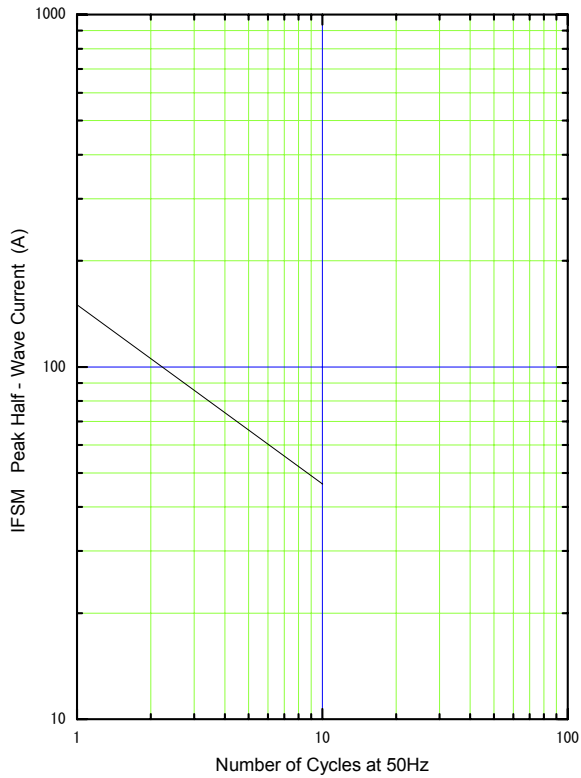


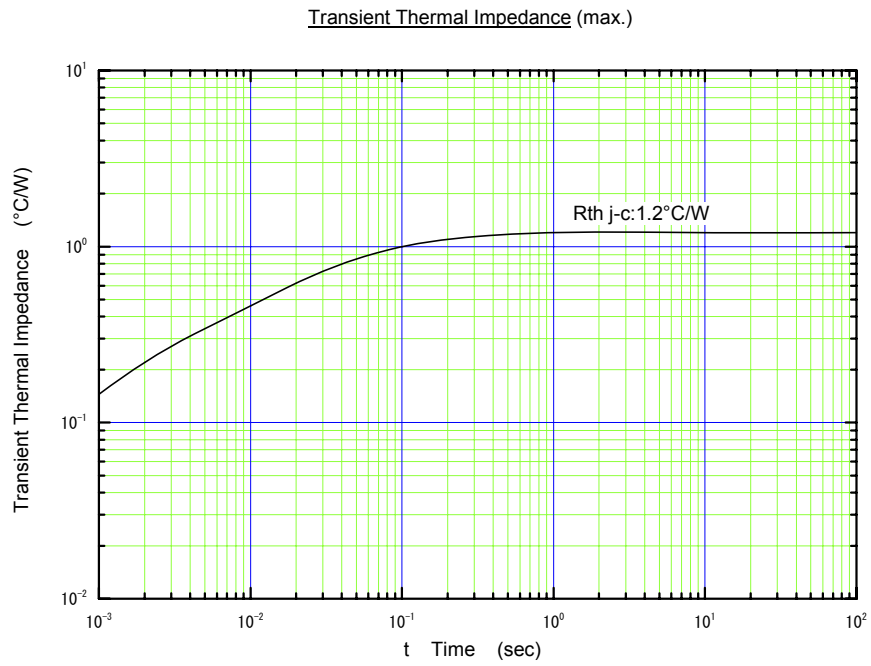
λ : Conduction angle of forward current for each rectifier element
 I_o : Output current of center-tap full wave connection

Junction Capacitance Characteristic (typ.)



Surge Capability (max.)





WARNING

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