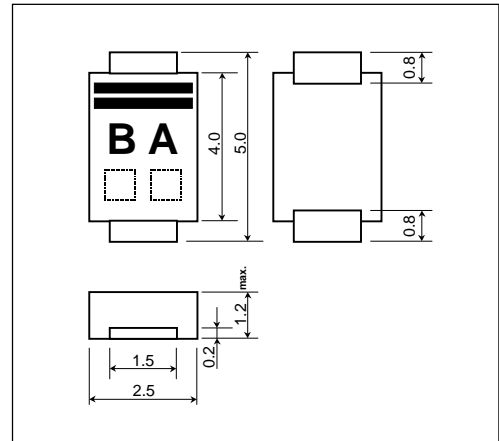


SD833-03

(30V / 3.0A)

SCHOTTKY BARRIER DIODE

■ Outline drawings, mm



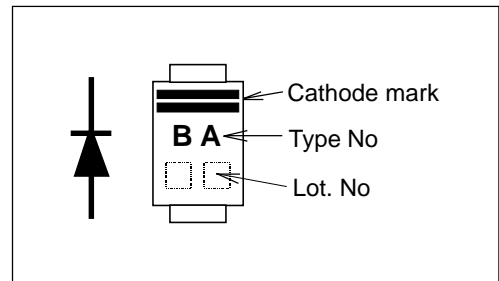
■ Features

- Surface-mount device
- Low V_F
- Super high speed switching
- High reliability by planer design

■ Applications

- High speed switching

■ Marking



■ Maximum ratings and characteristics

- Absolute maximum ratings

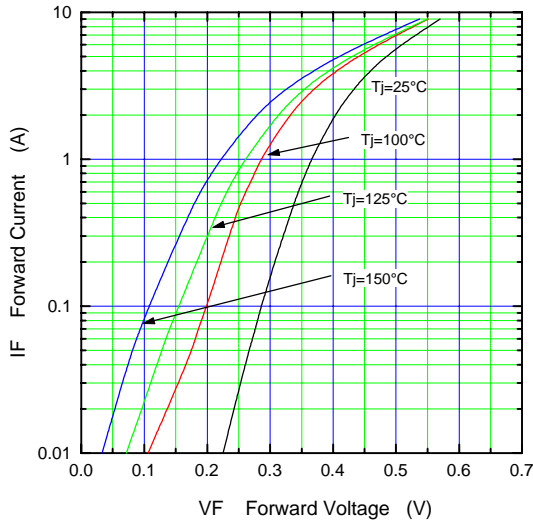
| Item | Symbol | Conditions | Rating | Unit |
|-------------------------------------|-----------|--|-------------|-------------|
| Repetitive peak reverse voltage | V_{RRM} | | 30 | V |
| Non-repetitive peak reverse voltage | V_{RSM} | $t_w=500ns$, $duty=1/40$ | 30 | V |
| Average output current | I_o | square wave $duty=1/2$ $T_I=127^{\circ}C$ | 3.0 | A |
| Surge current | I_{FSM} | Sine wave 10ms, 1shot | 70 | A |
| Operating junction temperature | T_j | | -40 to +150 | $^{\circ}C$ |
| Storage temperature | T_{stg} | | -40 to +150 | $^{\circ}C$ |

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

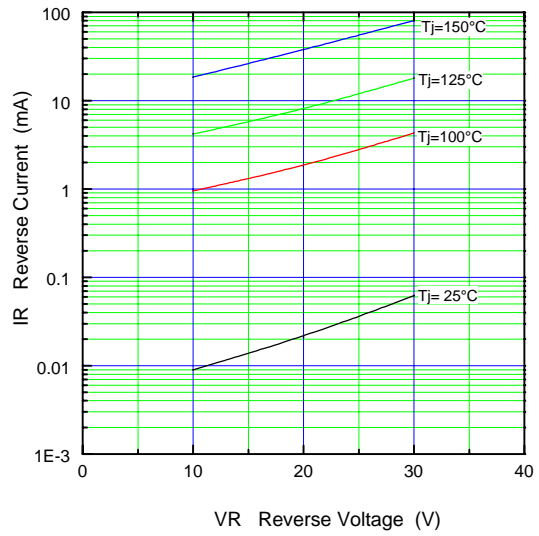
| Item | Symbol | Conditions | Max. | Unit |
|----------------------|---------------|------------------|------|---------------|
| Forward voltage drop | V_{FM} | $I_{FM}=3.0A$ | 0.46 | V |
| Reverse current | I_{RRM} | $V_R=V_{RRM}$ | 1.0 | mA |
| Thermal resistance | $R_{th(j-l)}$ | Junction to lead | 12 | $^{\circ}C/W$ |

■ Characteristics

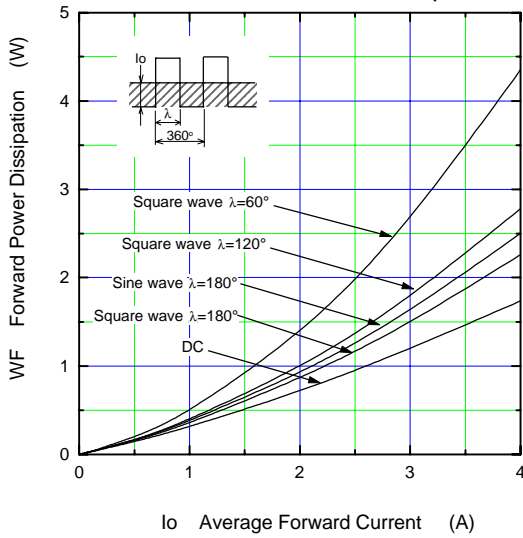
Forward Characteristic (typ.)



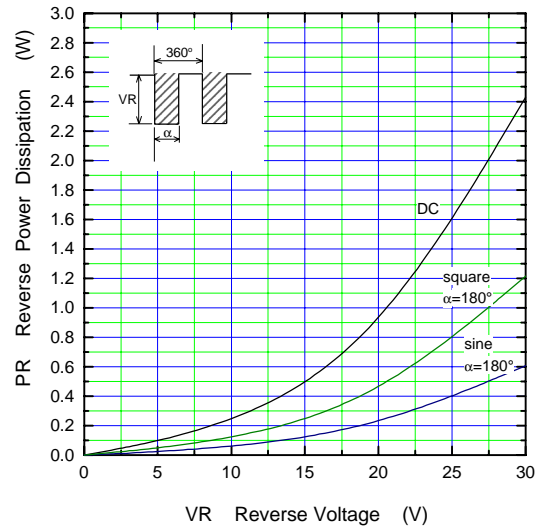
Reverse Characteristic (typ.)



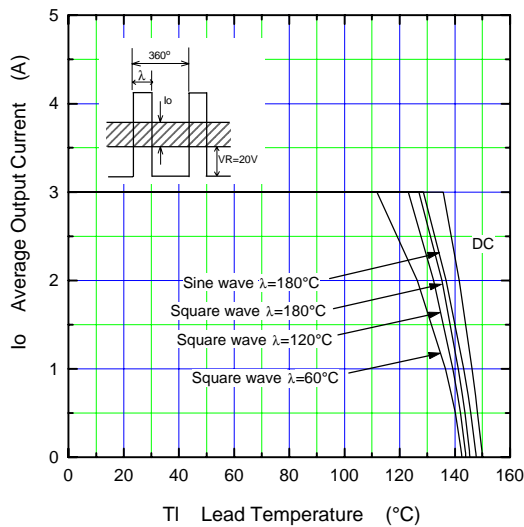
Forward Power Dissipation



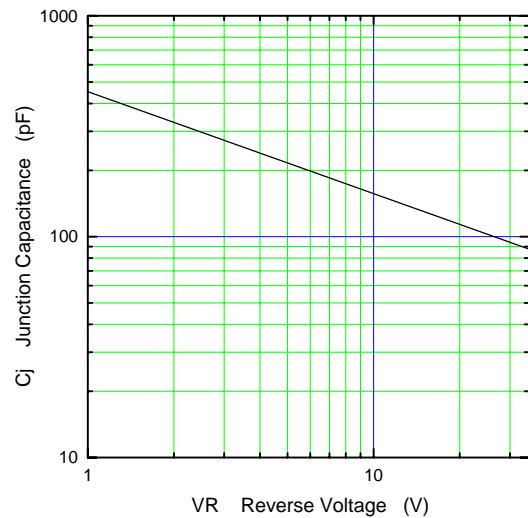
Reverse Power Dissipation



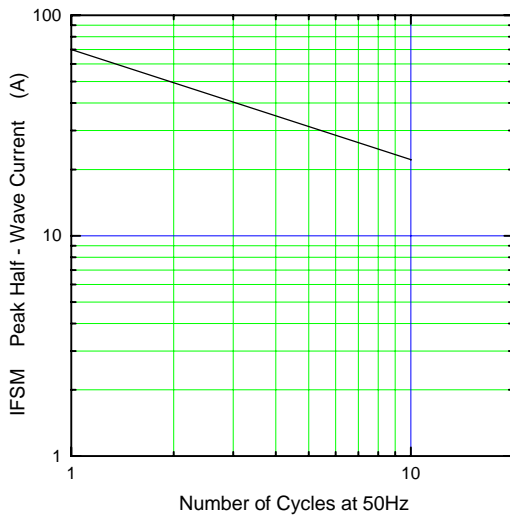
Current Derating (Io-TI)



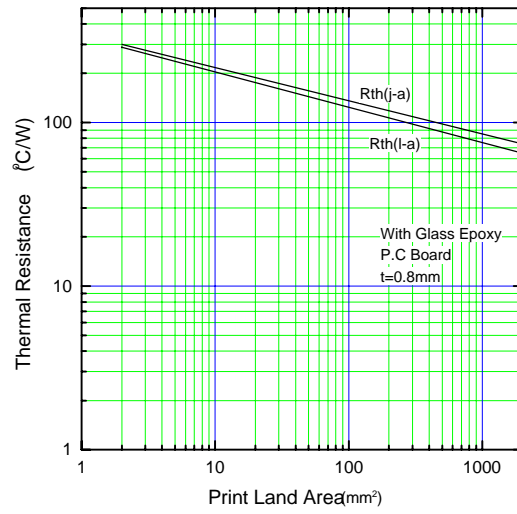
Junction Capacitance Characteristic (typ.)



Surge Capability



Thermal Resistance Print Land



Transient Thermal Impedance

