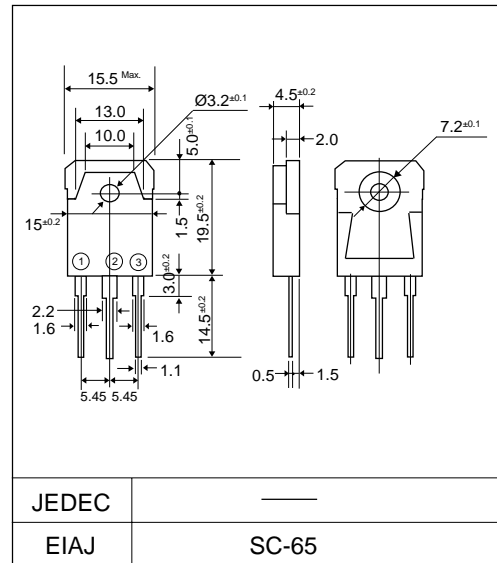


ESAE83-006 (60A)

(60V / 60A)

SCHOTTKY BARRIER DIODE

Outline drawings, mm



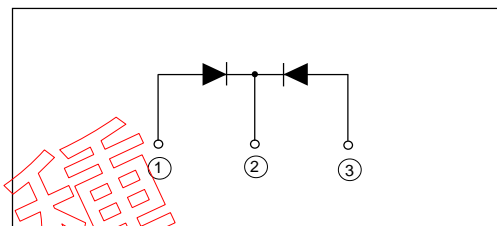
Features

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

Applications

- High speed power switching

Connection diagram



Maximum ratings and characteristics

- Absolute maximum ratings

| Item | Symbol | Conditions | Rating | Unit |
|-------------------------------------|-----------|--|-------------|------------------|
| Repetitive peak reverse voltage | V_{RRM} | | 60 | V |
| Non-repetitive peak reverse voltage | V_{RSM} | $t_w=500\text{ns}$, duty=1/40 | 60 | V |
| Average output current | I_o | Square wave, duty=1/2 $T_c=113^\circ\text{C}$ | 60* | A |
| Surge current | I_{FSM} | Sine wave 10ms | 500 | A |
| Operating junction temperature | T_j | | -40 to +150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | | -40 to +150 | $^\circ\text{C}$ |

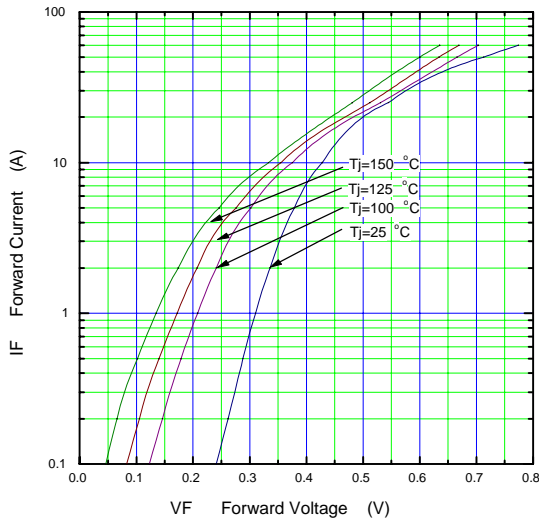
* Average forward current of centertap full wave connection

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

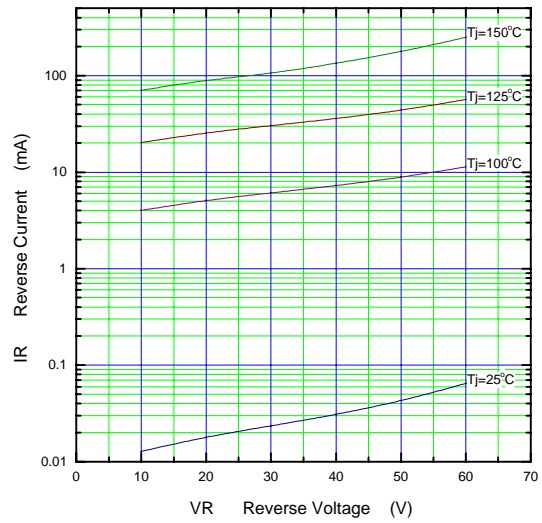
| Item | Symbol | Conditions | Max. | Unit |
|----------------------|---------------|---------------------|------|--------------------|
| Forward voltage drop | V_{FM} | $I_{FM}=25\text{A}$ | 0.58 | V |
| Reverse current | I_{RRM} | $V_R=V_{RRM}$ | 50 | mA |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 0.75 | $^\circ\text{C/W}$ |

Characteristics

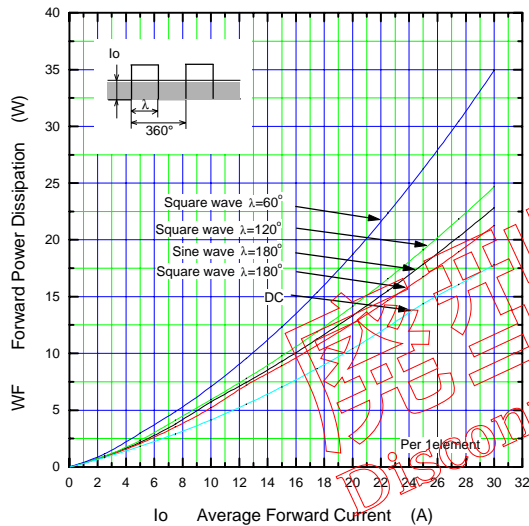
Forward Characteristic (typ.)



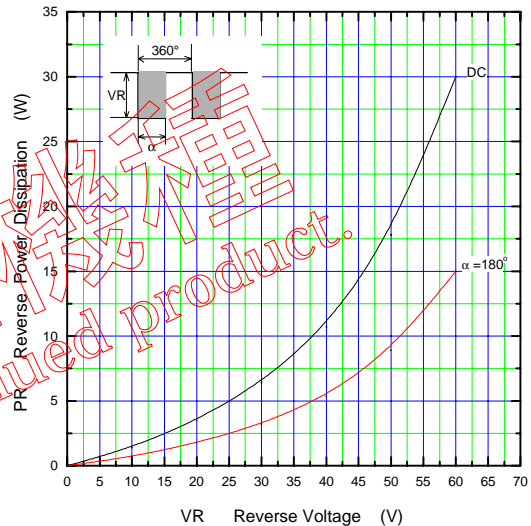
Reverse Characteristic (typ.)



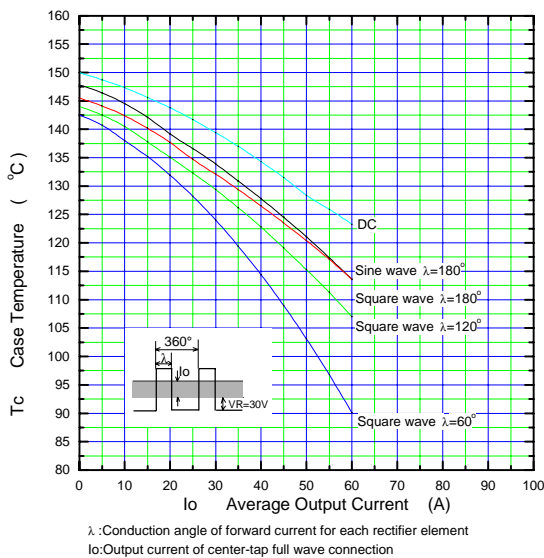
Forward Power Dissipation



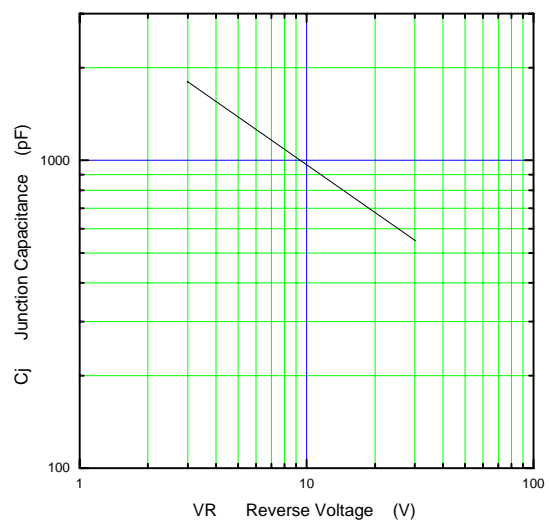
Reverse Power Dissipation



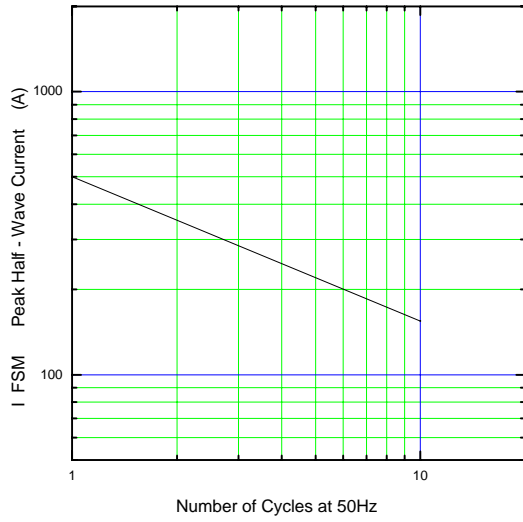
Current Derating (Io-Tc)



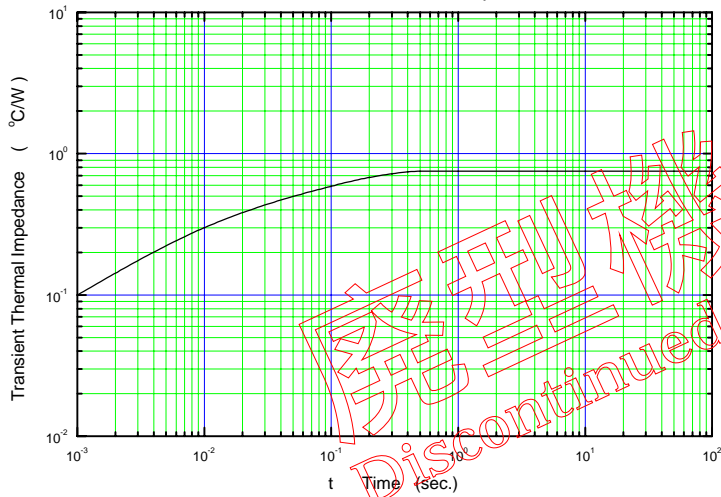
Junction Capacitance Characteristic (typ.)



Surge Capability



Transient Thermal Impedance



廢刊機種
Discontinued product.