

ERC20M (5A)

(200V to 800V / 5A)

FAST RECOVERY DIODE

Features

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

Applications

- High speed switching

Maximum ratings and characteristics

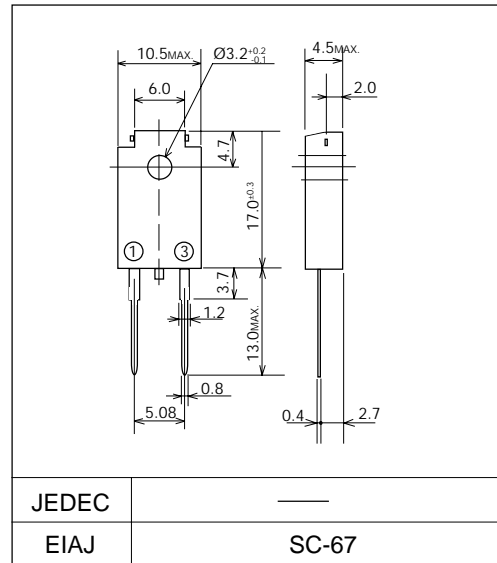
- Absolute maximum ratings

| Item | Symbol | Conditions | Rating | | | | Unit |
|-------------------------------------|-----------|---|-------------|-----|-----|-----|-------------|
| | | | -02 | -04 | -06 | -08 | |
| Repetitive peak reverse voltage | V_{RRM} | | 200 | 400 | 600 | 800 | V |
| Non-repetitive peak reverse voltage | V_{RSM} | | 250 | 450 | 650 | 850 | V |
| Average output current | I_o | Square wave, duty=1/2, $T_c=125^{\circ}C$ | 5 | | | | A |
| Surge current | I_{FSM} | Sine wave 10ms | 70 | | | | A |
| Operating junction temperature | T_j | | -40 to +150 | | | | $^{\circ}C$ |
| Storage temperature | T_{stg} | | -40 to +150 | | | | $^{\circ}C$ |

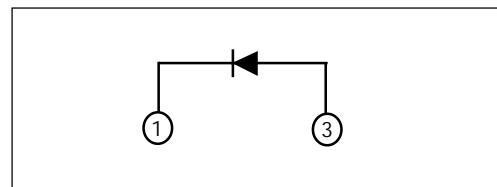
- Electrical characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

| Item | Symbol | Conditions | Max. | | | | Unit |
|-----------------------|---------------|----------------------|------|-----|-----|-----|---------------|
| | | | -02 | -04 | -06 | -08 | |
| Forward voltage drop | V_{FM} | $I_{FM}=5.0A$ | 1.3 | | 1.5 | | V |
| Reverse current | I_{RRM} | $V_R=V_{RRM}$ | 50 | | | | μA |
| Reverse recovery time | t_{rr} | $I_F=0.1A, I_R=0.1A$ | 400 | | | | ns |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 3.5 | | | | $^{\circ}C/W$ |

Outline drawings, mm

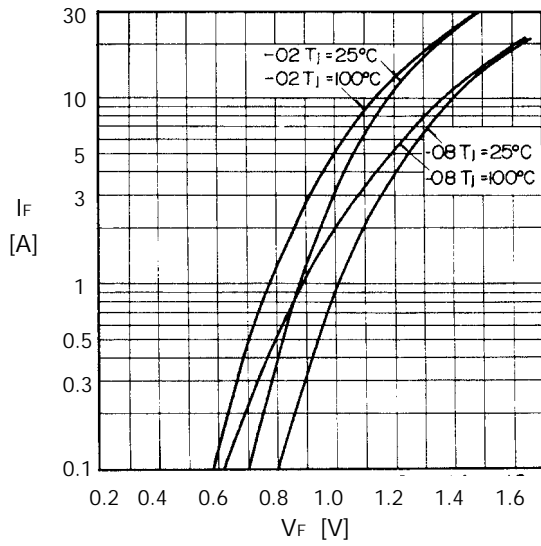


Connection diagram

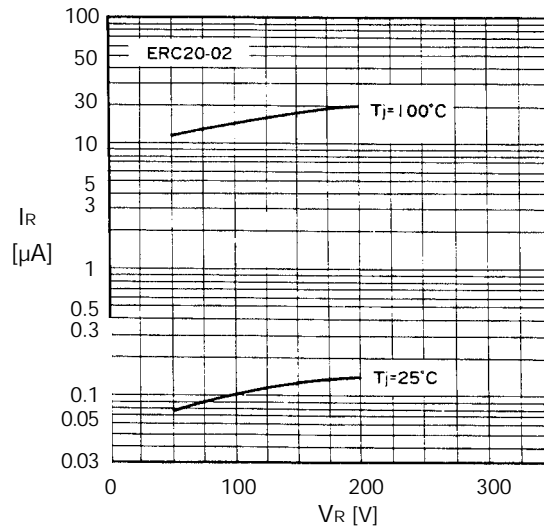


■ Characteristics

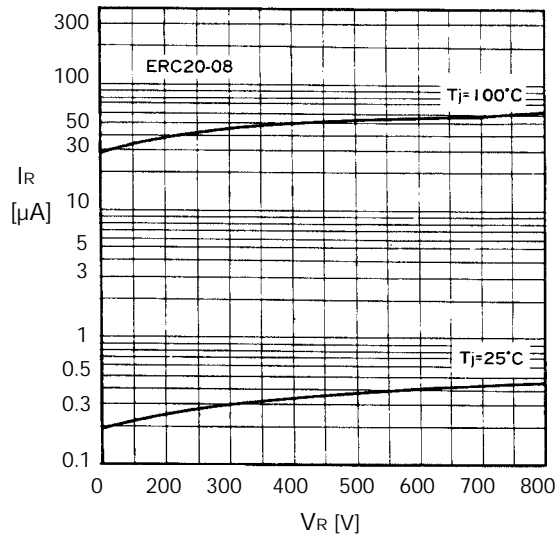
Forward characteristics



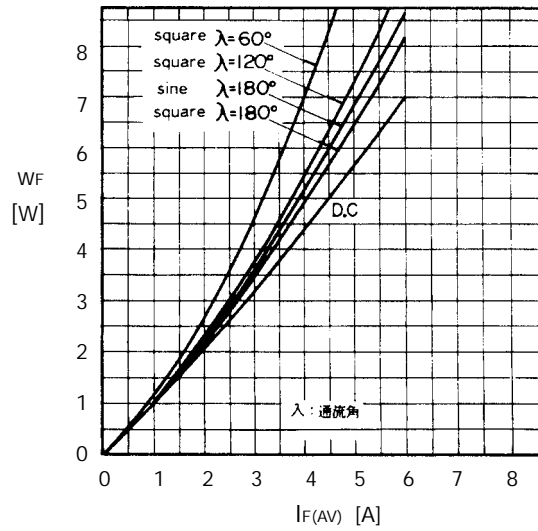
Reverse characteristics



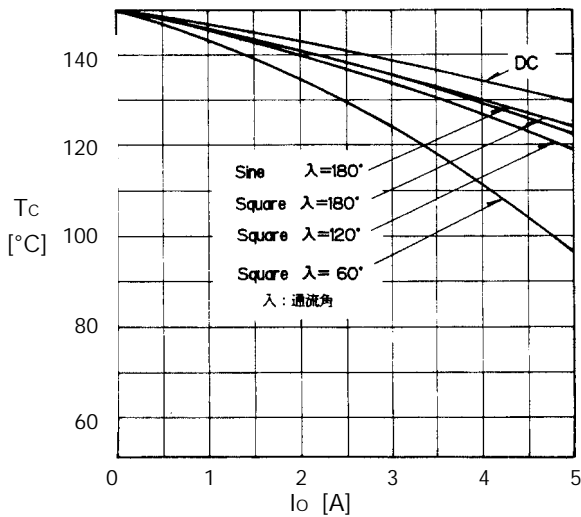
Reverse characteristics



Forward power dissipation



Output current-case temperature



Junction capacitance characteristics

