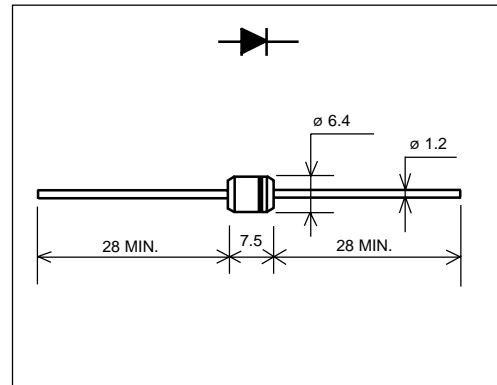


# ERC81S-004 (5.0A)

(40V / 5.0A)

## SCHOTTKY BARRIER DIODE

### ■ Outline drawings, mm



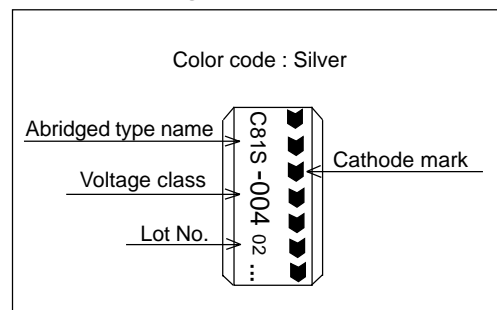
### ■ Features

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

### ■ Applications

- High speed power switching

### ■ Marking



### ■ Maximum ratings and characteristics

- Absolute maximum ratings

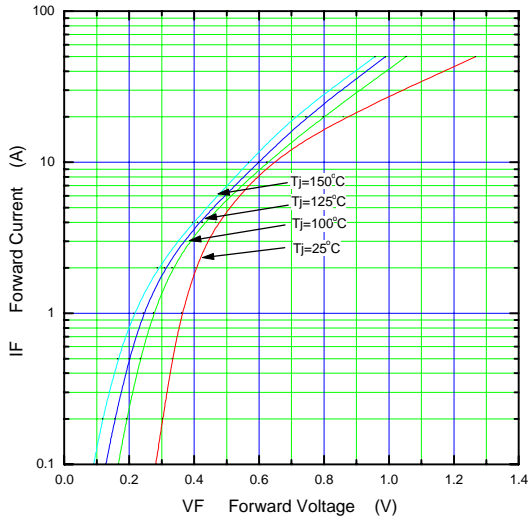
| Item                            | Symbol      | Conditions   | Rating      | Unit               |
|---------------------------------|-------------|--|-------------|--------------------|
| Repetitive peak reverse voltage | $V_{RRM}$   |  | 40          | V                  |
| Average forward current         | $I_{F(AV)}$ | Square wave, duty=1/2<br>$T_I=108^{\circ}\text{C}$ | 5.0         | A                  |
| Surge current                   | $I_{FSM}$   | Sine wave<br>10ms                                  | 120         | A                  |
| Operating junction temperature  | $T_j$       |  | -40 to +150 | $^{\circ}\text{C}$ |
| Storage temperature             | $T_{stg}$   |  | -40 to +150 | $^{\circ}\text{C}$ |

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

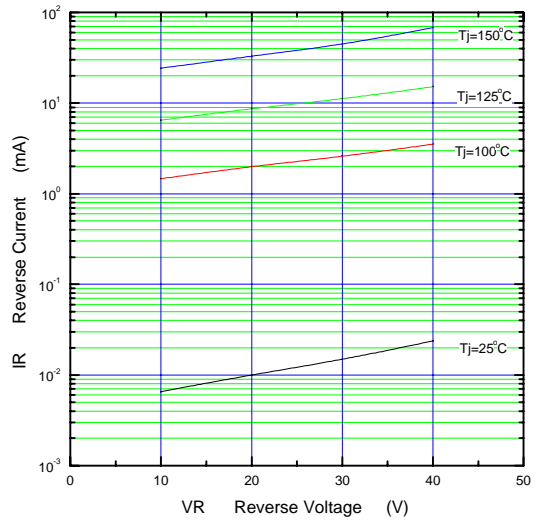
| Item                 | Symbol    | Conditions           | Max. | Unit |
|----------------------|-----------|----------------------|------|------|
| Forward voltage drop | $V_{FM}$  | $I_{FM}=5.0\text{A}$ | 0.55 | V    |
| Reverse current      | $I_{RRM}$ | $V_R=V_{RRM}$        | 5.0  | mA   |

■ Characteristics

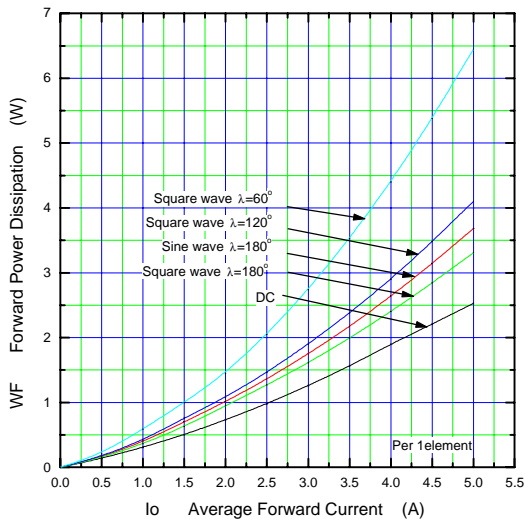
Forward Characteristic (typ.)



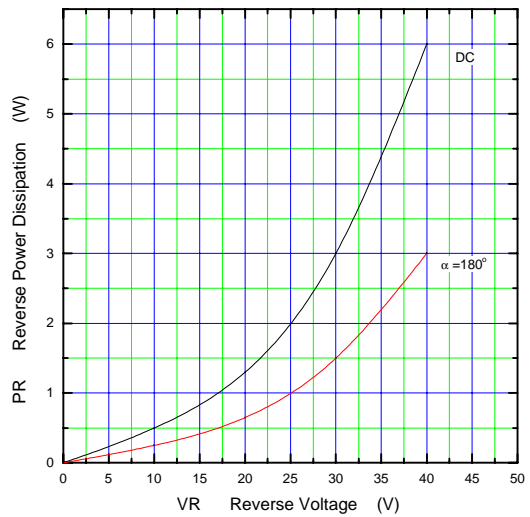
Reverse Characteristic (typ.)



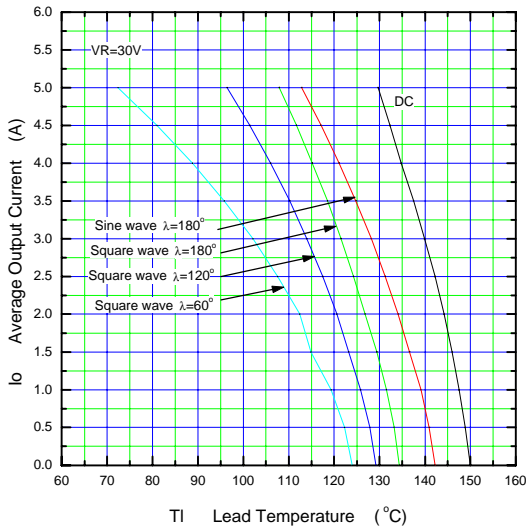
Forward Power Dissipation



Reverse Power Dissipation



Current Derating (Io-Tl)



Junction Capacitance Characteristic (typ.)

