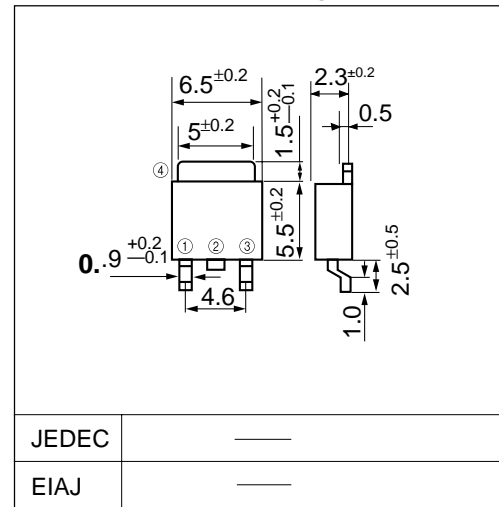


# KS826S04 (5A)

(40V / 5A)

## SCHOTTKY BARRIER DIODE

### Outline drawings, mm



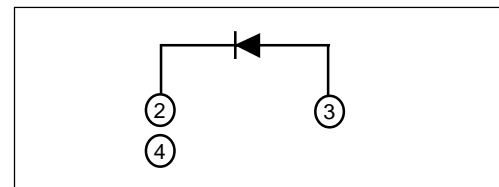
### Features

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

### Applications

- High speed power switching

### Connection diagram



### Maximum ratings and characteristics

- Absolute maximum ratings

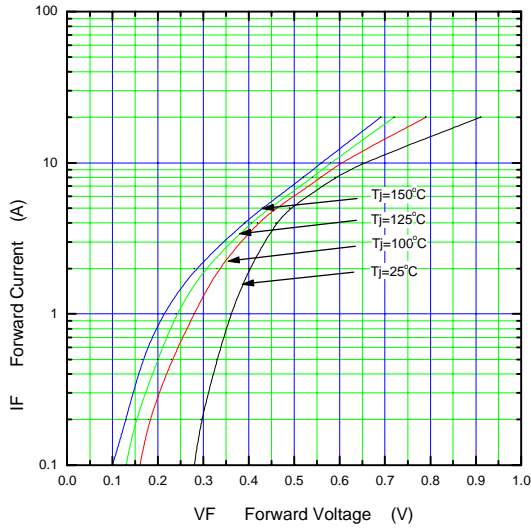
| Item                                | Symbol    | Conditions  | Rating      | Unit             |
|-------------------------------------|-----------|---|-------------|------------------|
| Repetitive peak reverse voltage     | $V_{RRM}$ |   | 40          | V                |
| Non-repetitive peak reverse voltage | $V_{RSM}$ | $t_w=500\text{ns}$ , $\text{duty}=1/40$                   | 48          | V                |
| Average output current              | $I_o$     | Square wave, $\text{duty}=1/2$<br>$T_c=110^\circ\text{C}$ | 5.0         | A                |
| Surge current                       | $I_{FSM}$ | Sine wave<br>10ms   | 80          | 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)

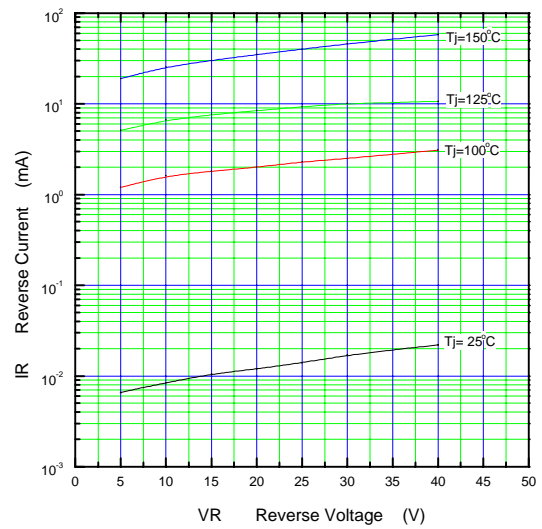
| Item                 | Symbol        | Conditions           | Max. | Unit                      |
|----------------------|---------------|----------------------|------|---------------------------|
| Forward voltage drop | $V_{FM}$      | $I_{FM}=5.0\text{A}$ | 0.55 | V                         |
| Reverse current      | $I_{RRM}$     | $V_R=V_{RRM}$        | 5.0  | mA                        |
| Thermal resistance   | $R_{th(j-c)}$ | Junction to case     | 10   | $^\circ\text{C}/\text{W}$ |

■ Characteristics

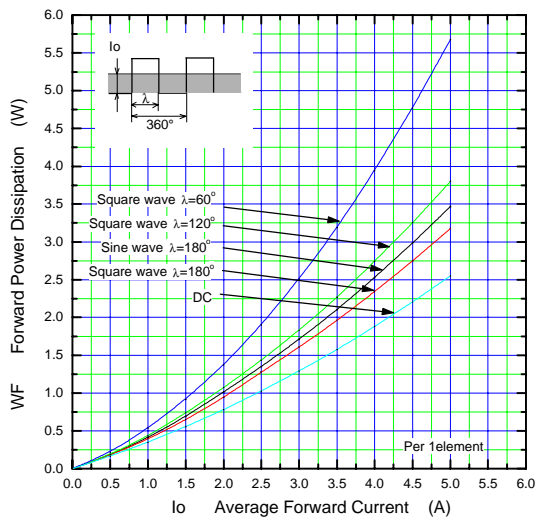
Forward Characteristic (typ.)



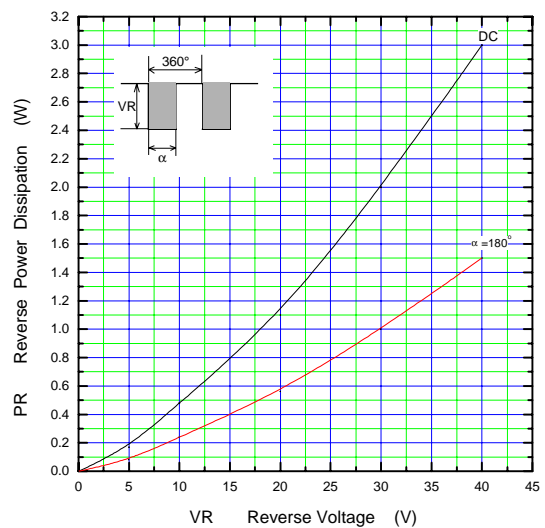
Reverse Characteristic (typ.)



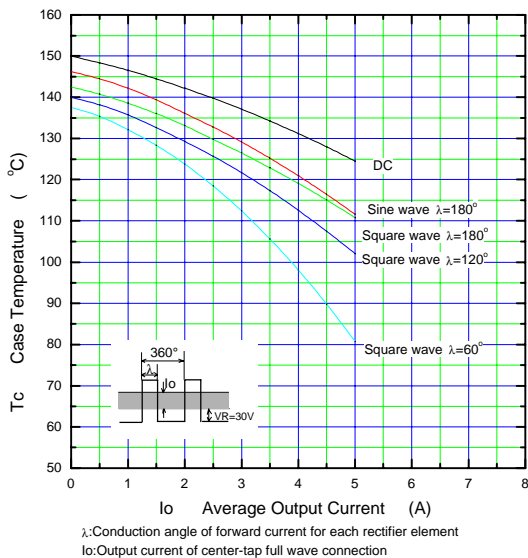
Forward Power Dissipation



Reverse Power Dissipation



Current Derating (I<sub>o</sub>-T<sub>c</sub>)



Junction Capacitance Characteristic (typ.)

