

SCHOTTKY RECTIFIERS

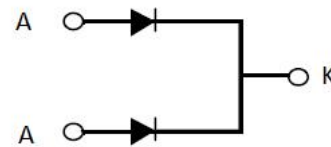
Features:

- High ESD capacity
- High junction temperature capability
- High frequency operation
- Low leakage current
- High surge capacity



Applications:

- Switching mode power supply
- High frequency inverter circuit
- Polarity protection circuit



| Product Summary | |
|-----------------|-------|
| V_R | 45V |
| $I_{F(AV)}$ | 2*5A |
| T_j | 125°C |
| $V_F(max.)$ | 0.50V |

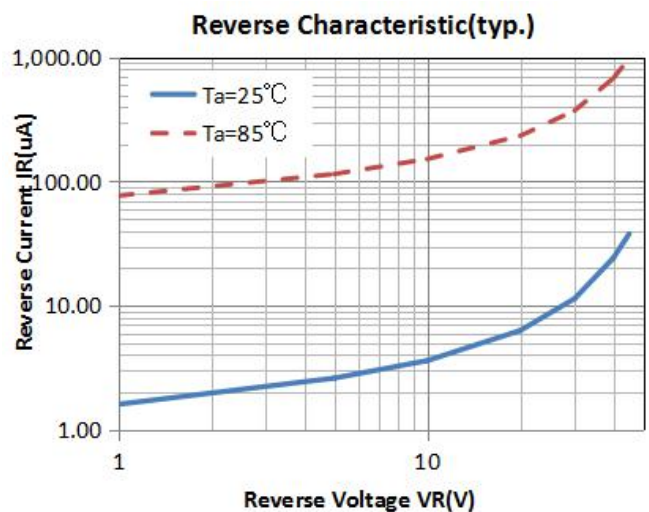
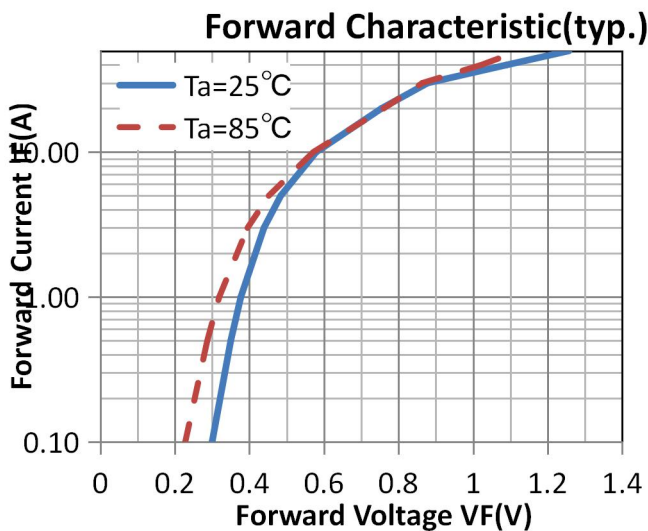
| Absolute Maximum Ratings | | | |
|---------------------------------------|-------------|-------------|-------|
| Parameter | Symbol | Values | Units |
| Repetitive peak reverse voltage | V_{RRM} | 45 | V |
| Continuous forward current | $I_{F(AV)}$ | 10 | A |
| Single pulse forward current | I_{FSM} | 100 | |
| Operating junction | T_j | 125 | °C |
| Storage temperatures | T_{stg} | -55 to +150 | °C |
| Peak Repetitive Reverse Surge Current | I_{RRM} | | A |

| Electrical characteristics (Ta=25°C unless otherwise specified) | | | | | | |
|---|---------------------|----------------------------|-----|-------|-------|---------|
| Parameter | Symbol | Test Conditions | Min | Typ. | Max. | Units |
| Breakdown voltage Blocking voltage | V_{BR} , V_R | $I_R=100\mu A$ | 45 | | | V |
| Forward voltage (Per Diode) | V_F | $I_F=5 A$ | | 0.484 | 0.550 | |
| | | $I_F=5 A, T_j=85^\circ C$ | | 0.460 | 0.520 | |
| Reverse leakage current(Per Diode) | I_R | $V_R=V_{RRM}$ | | | 20 | μA |
| | | $T_j=125^\circ C, V_R=45V$ | | | 10 | mA |

Thermal characteristics

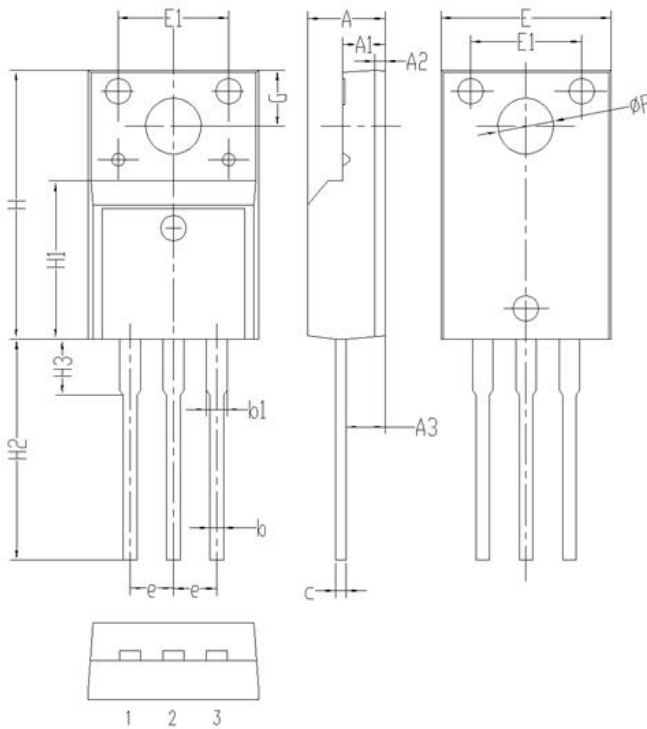
| Parameter | Symbol | Typ. | Units |
|------------------|-----------------|------|--------------|
| Junction-to-Case | $R_{\theta JC}$ | 1.67 | $^\circ C/W$ |

Electrical performance (typic)



Package Information

TO-220F PACKAGE



| Symbol | Dimensions(millimeters) | |
|--------|-------------------------|------|
| | Min. | Max. |
| A | 4.35 | 4.75 |
| A1 | 2.30 | 2.70 |
| A2 | 0.40 | 0.80 |
| A3 | 2.10 | 2.50 |
| b | 0.60 | 1.00 |
| b1 | 1.00 | 1.40 |
| c | 0.30 | 0.70 |
| e | 2.30 | 2.70 |
| E | 9.80 | 10.2 |
| E1 | 6.30 | 6.70 |
| H | 15.6 | 16.0 |
| H1 | 8.80 | 9.20 |
| H2 | 12.9 | 13.5 |
| H3 | 3.10 | 3.50 |
| G | 3.10 | 3.50 |
| ΦP | 3.10 | 3.50 |