Elektronische Bauelemente

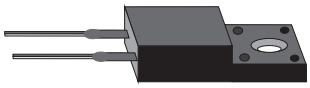
# SP05150S

**VOLTAGE 150V**

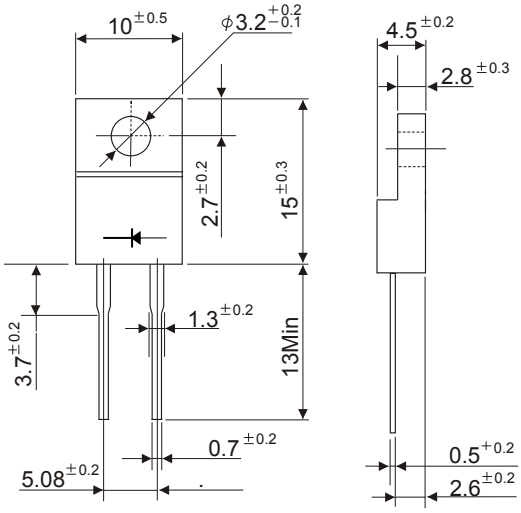
**5.0AMP Schottky Barrier Rectifiers**

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free



**ITO-220A**




Dimensions in millimeters

## FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Epitaxial construction

## MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
* Polarity: As Marked
* Mounting position: Any
* Weight: 2.24 grams(Approximately)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | SYMBOL | SP05150S | UNITS |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 150 | V |
| Working Peak Reverse Voltage | $V_{RSM}$ | 150 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 150 | V |
| Maximum Average Forward Rectified Current | $I_F$ | 5 | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$ | 130 | A |
| Maximum Instantaneous Forward Voltage ($I_F$ = 5 Amps, $T_F$= 25°C, per leg)<br>Maximum Instantaneous Forward Voltage ($I_F$ = 5 Amps, $T_F$= 125°C, per leg) | $V_F$ | 0.86<br>0.75 | V |
| Maximum DC Reverse Current Ta=25°C<br>at Rated DC Blocking Voltage Ta=125°C | $I_R$ | 0.05<br>8 | mA |
| Typical Junction Capacitance (Note1) | $C_J$ | 350 | pF |
| Typical Thermal Resistance (Note 2) | $R\theta_{JA}$ | 4.0 | °C/W |
| Voltage Rate Of Chance (Rated $V_R$) | dv/dt | 10000 | V/us |
| Operating Temperature Range | $T_J$ | -50 ~ +150 | °C |
| Storage Temperature Range | $T_{STG}$ | -65 ~ +175 | °C |

NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.

2. Thermal Resistance Junction to Case.

Elektronische Bauelemente

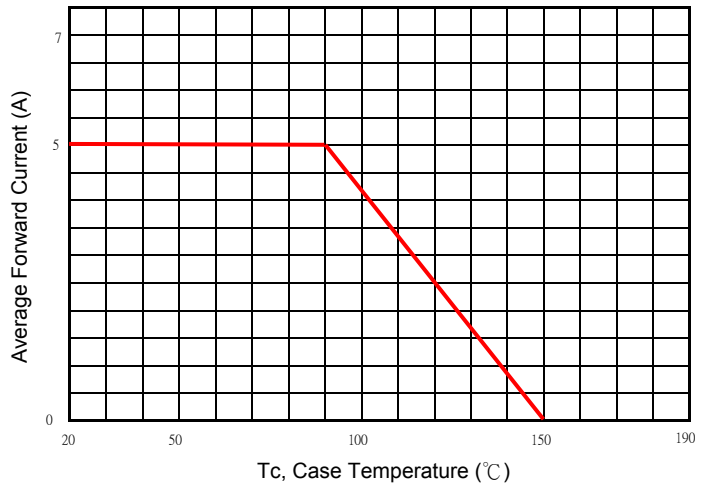
# SP05150S

**VOLTAGE 150V**

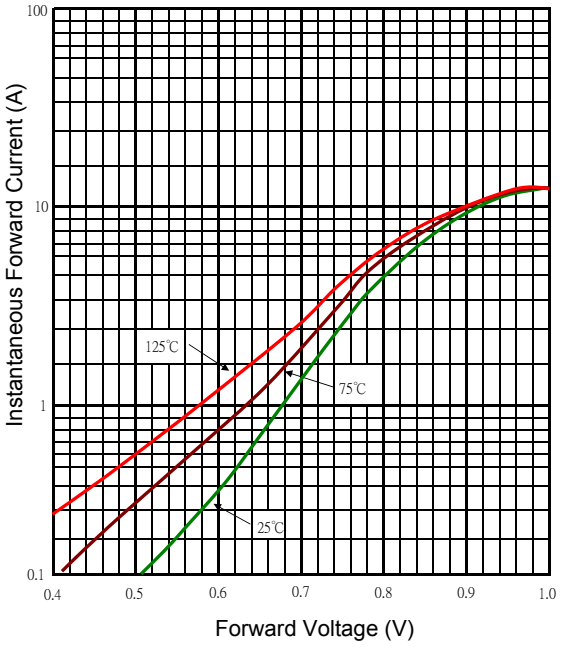
**5.0AMP Schottky Barrier Rectifiers**

## RATING AND CHARACTERISTIC CURVES

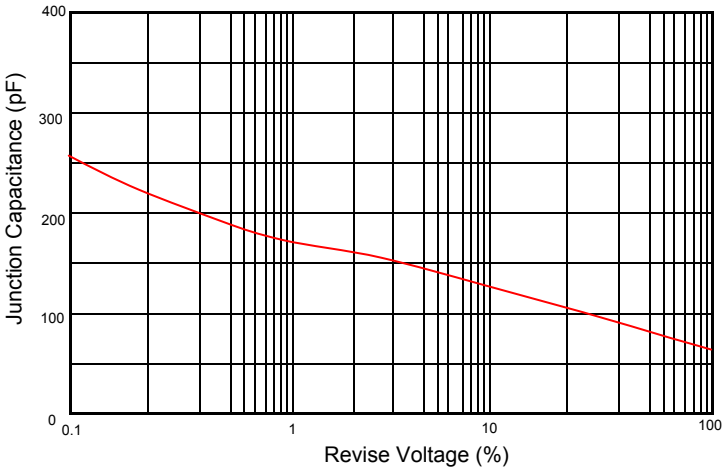
Typical Forward Current Derating Curve



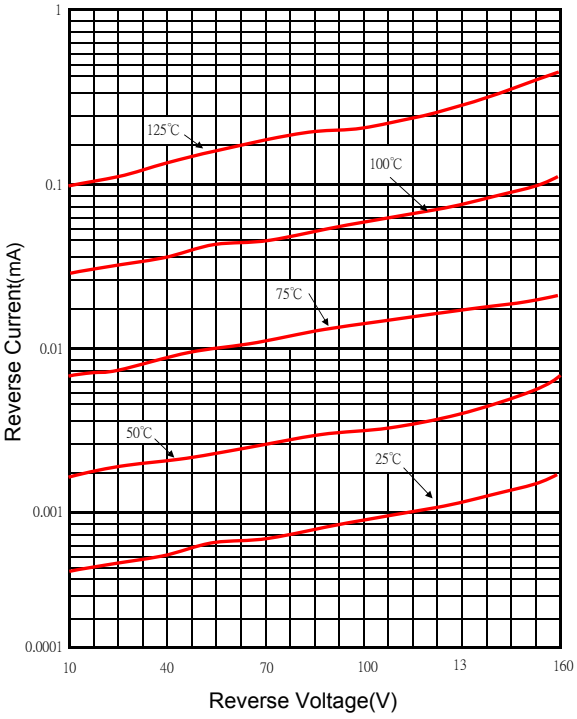

Typical Forward Characteristic




Typical Junction Capacitance




Typical Reverse Characteristic




Maximum Non- Repetitive Forward Surge Current

