Elektronische Bauelemente

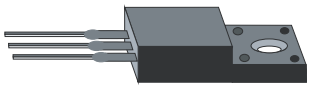
SP10100

VOLTAGE 100 V

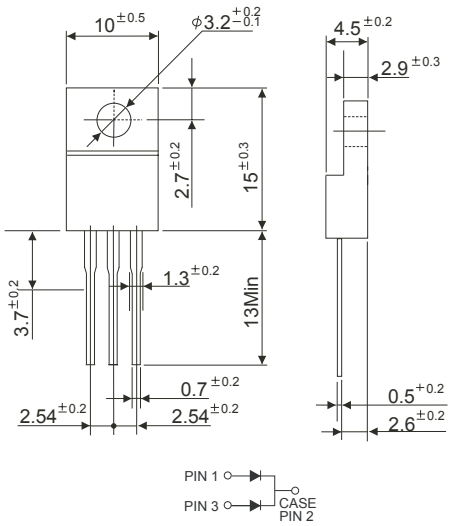
10.0 Amp Schottky Barrier Rectifiers

RoHS Compliant Product

A suffix of "-C" specifies halogen free



ITO-220



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: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.98 grams (approximate)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

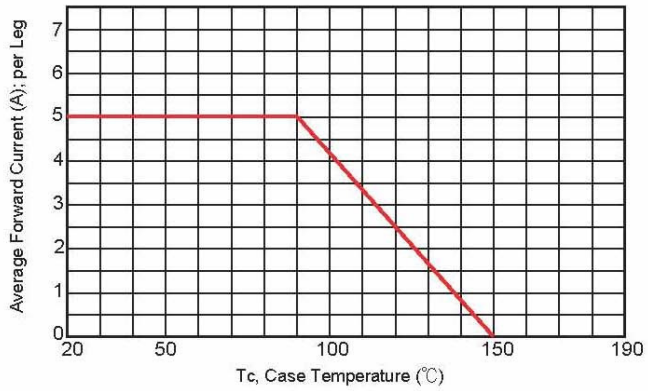
Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.

TYPE NUMBER	SYMBOL	SP10100	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RSM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current Per Leg Per Device	I_F	5 10	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 A, T_A = 25°C, per leg I_F = 5 A, T_A = 125°C, per leg	V_F	0.82 0.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A=25°C T_A=100°C	I_R	0.05 10	mA
Typical Junction Capacitance (Note 1)	C_J	350	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	4.0	°C /W
	dv / dt	10000	V / μs
Operating Temperature Range T_J	T_J	-50 ~ +150	°C
Storage Temperature Range T_{STG}	T_{STG}	-65 ~ +175	°C

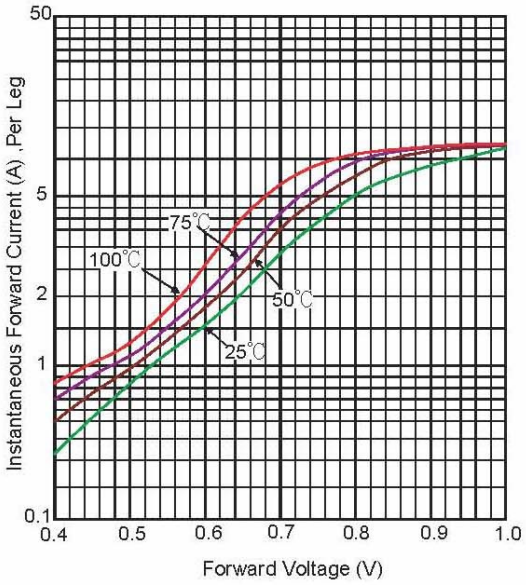
NOTES:
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

RATINGS AND CHARACTERISTIC CURVES (SP10100)

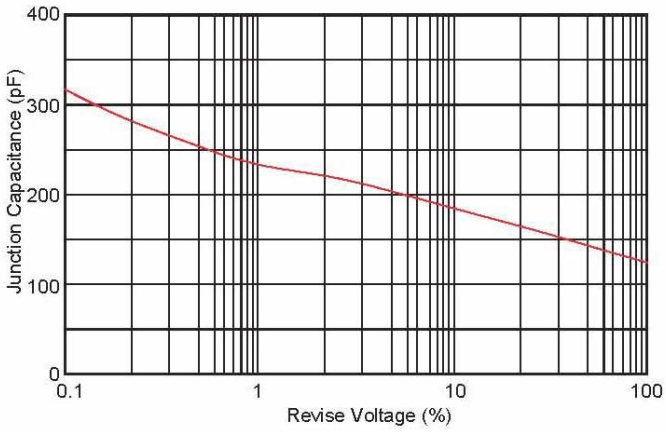
Typical Forward Current Derating Curve



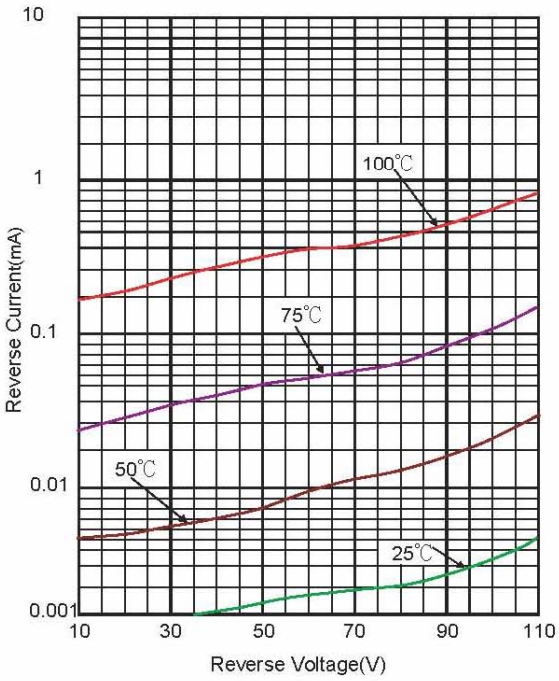
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

