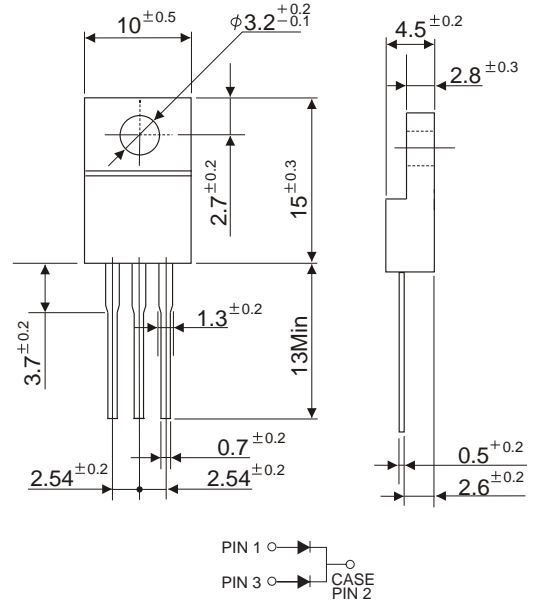


RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-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: 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	SP20250	UNITS
Maximum Recurrent Peak Reverse Voltage	250	V
Working Peak Reverse Voltage	250	V
Maximum DC Blocking Voltage	250	V
Maximum Average Forward Rectified Current, See Fig. 1	20.0	A
Peak Forward Surge Current, 8.3 ms single half Sine-wave superimposed on rated load (JEDEC method)	200	A
Maximum Instantaneous Forward Voltage (I <sub>F</sub> = 10 Amps, T <sub>A</sub> = 25 °C )	0.95	V
Maximum Instantaneous Forward Voltage (I <sub>F</sub> = 10 Amps, T <sub>A</sub> = 125 °C )	0.75	V
Maximum DC Reverse Current Ta=25 °C	0.02	mA
At Rated DC Blocking Voltage Ta=125 °C	10	mA
Typical Junction Capacitance (Note 1)	350	pF
Typical Thermal Resistance R <sub>θJA</sub> (Note 2)	2.0	°C / W
Operating Temperature Range T <sub>J</sub>	-50 ~ +150	°C
Storage Temperature Range T <sub>STG</sub>	-65 ~ +175	°C

NOTES:

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

## ● RATING AND CHARACTERISTIC CURVES (SP20250)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

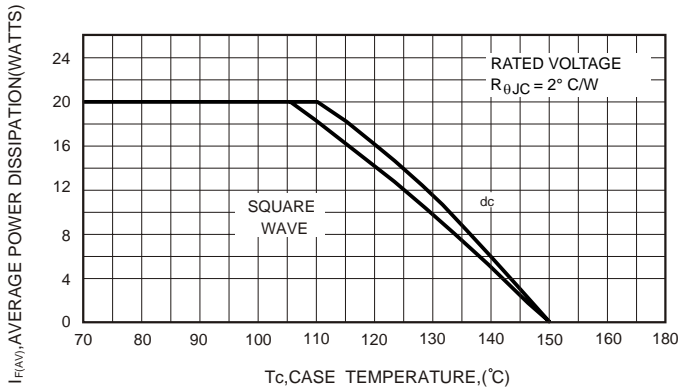


FIG.2- TYPICAL FORWARD VOLTAGE (PER LEG)

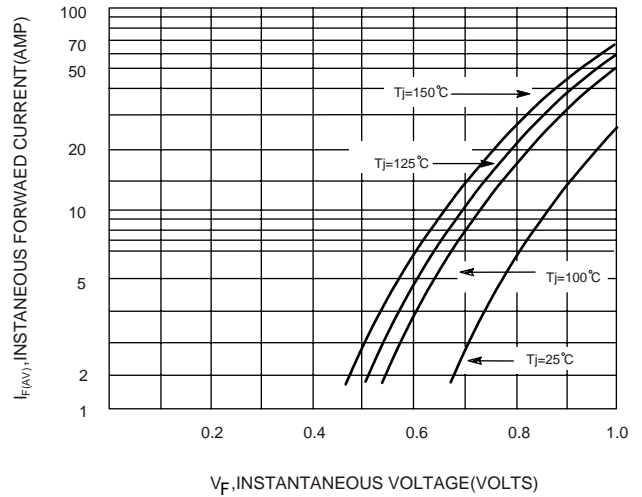


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

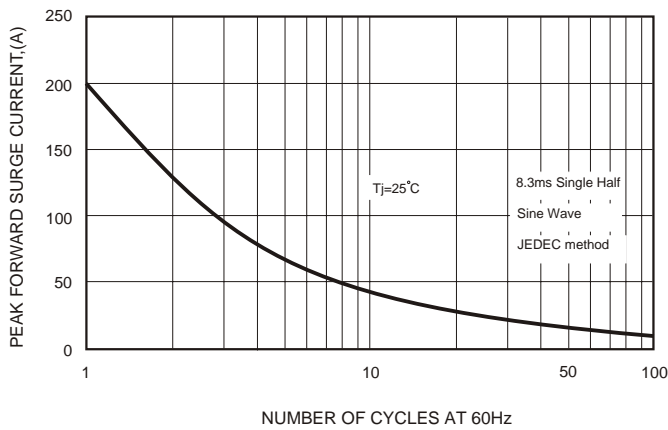


FIG.5-TYPICAL REVERSE CURRENT (PER LEG)

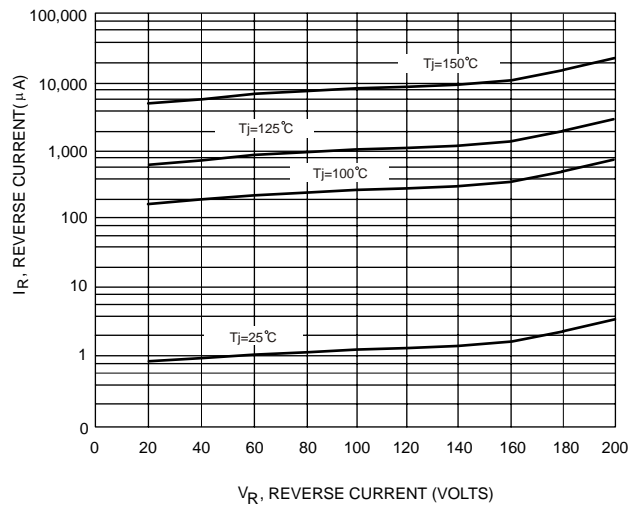


FIG.4-TYPICAL JUNCTION CAPACITANCE

