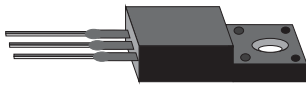


RoHS Compliant Product

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



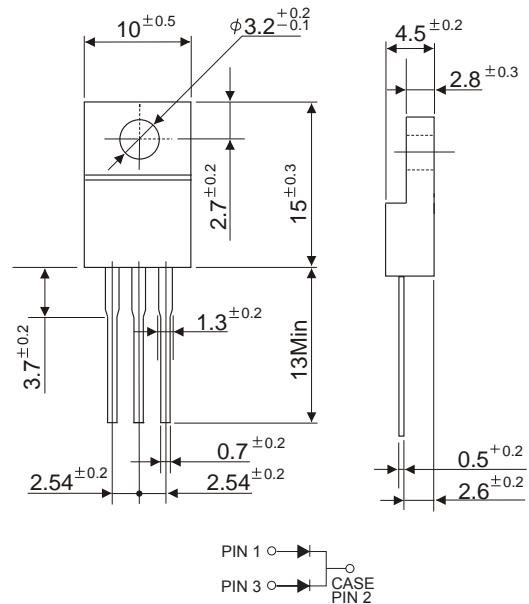
**ITO-220**

## 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



Dimensions in millimeters

## 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	SP1045	UNITS
Maximum Recurrent Peak Reverse Voltage	45	V
Working Peak Reverse Voltage	45	V
Maximum DC Blocking Voltage	45	V
Maximum Average Forward Rectified Current See Fig. 1	10	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150	A
Maximum Instantaneous Forward Voltage at 5.0A	0.55	V
Maximum DC Reverse Current Ta=25°C	0.3	mA
at Rated DC Blocking Voltage (Note3) Ta=100°C	45	mA
Typical Junction Capacitance (Note1)	700	pF
Typical Thermal Resistance RθJC (Note 2)	3.0	°C/W
Operating Temperature Range Tj	-50 ~ +150	°C
Storage Temperature Range Tstg	-65 ~ +175	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.
3. Pulse Test : Pulse Width = 300us, Duty Cycle ≤ 2.0%.

Typical Forward Current Derating Curve

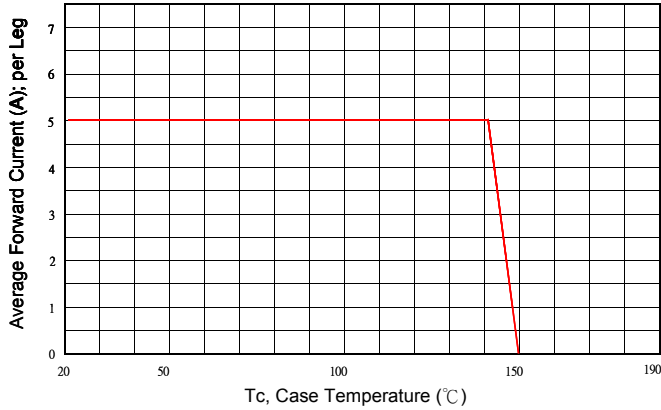


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

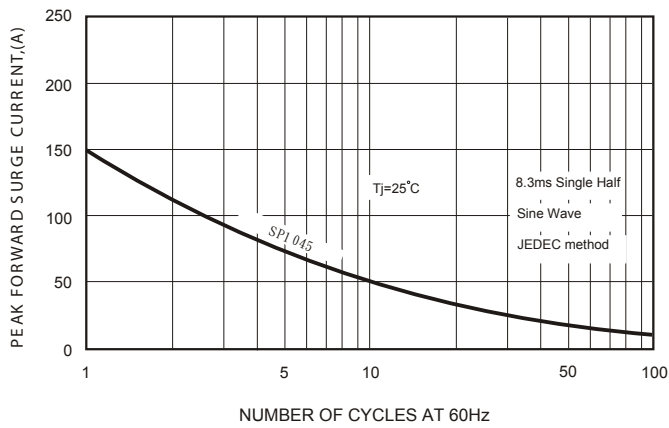


FIG.4-TYPICAL JUNCTION CAPACITANCE

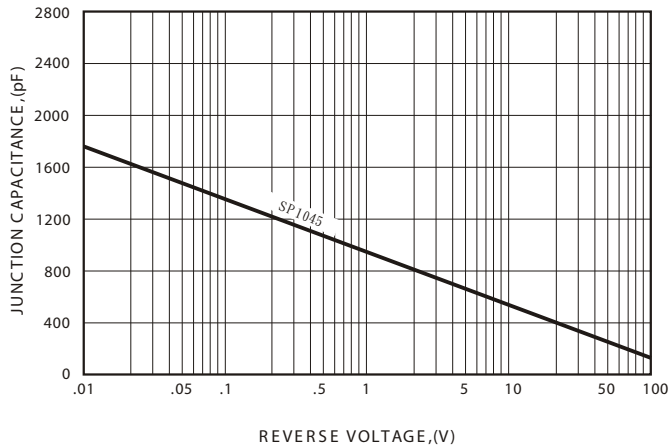


FIG.2-TYPICAL FORWARD CHARACTERISTICS

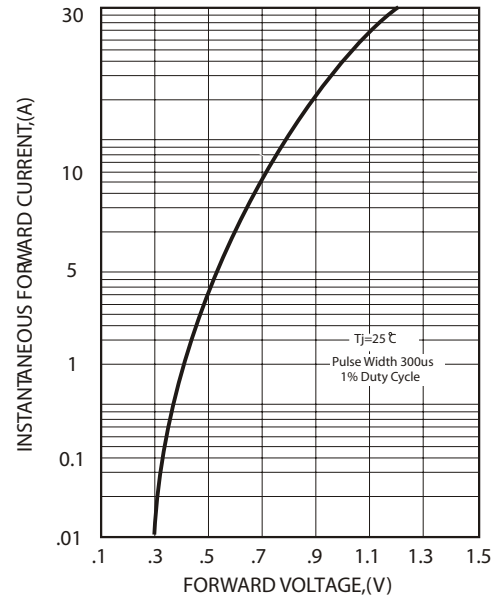


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

