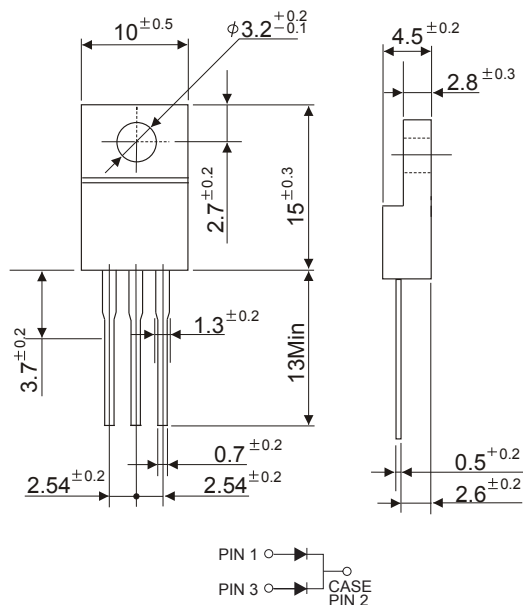


RoHS Compliant Product

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: 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

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	SP820S	SP840S	SP860S	SP880S	SP8100S	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	V
Maximum RMS Voltage	14	32	48	64	80	V
Maximum DC Blocking Voltage	20	40	60	80	100	V
Maximum Average Forward Rectified Current	8.0					A
See Fig. 1						
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150					A
Maximum Instantaneous Forward Voltage at 8.0A	0.55		0.70	0.80		V
Maximum DC Reverse Current Ta=25°C	5.0					mA
at Rated DC Blocking Voltage Ta=100°C	50					mA
Typical Junction Capacitance (Note1)	700			460		pF
Typical Thermal Resistance RθJC (Note 2)	3.5					°C/W
Operating Temperature Range Tj	-50 ~ +125					°C
Storage Temperature Range Tstg	-65 ~ +150					°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.

RATING AND CHARACTERISTIC CURVES (SP820S THRU SP8100S)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

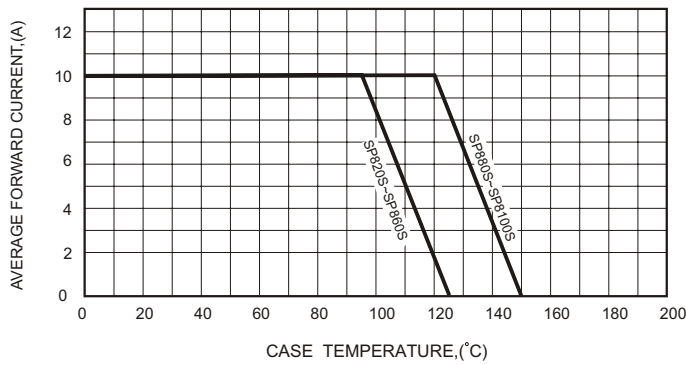


FIG.2-TYPICAL FORWARD CHARACTERISTICS

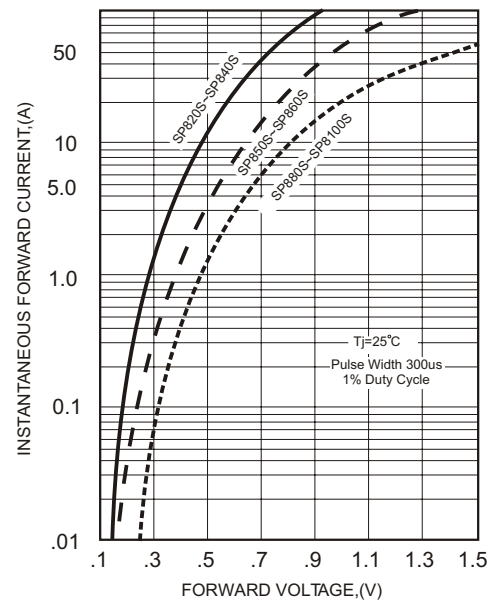


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

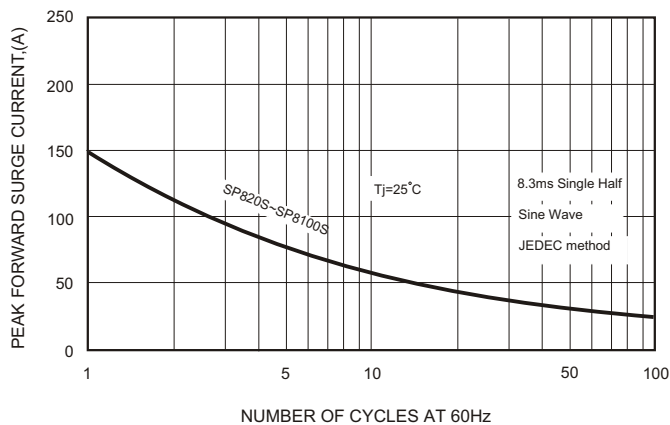


FIG.4-TYPICAL JUNCTION CAPACITANCE

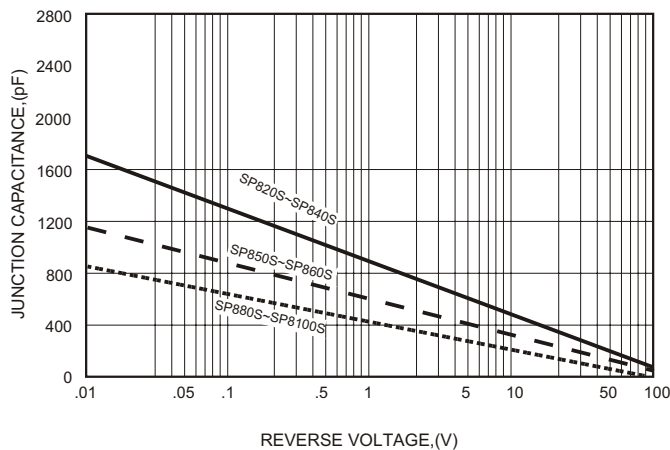


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

