

RoHS Compliant Product
 A suffix of "-C" specifies halogen free

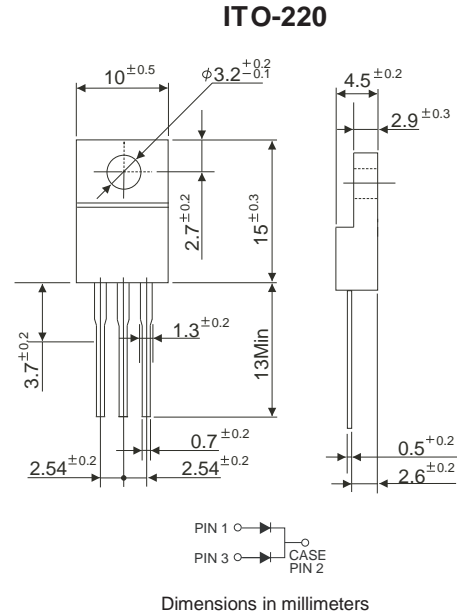


FEATURES

- 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	I_F	5	A
Per Leg		10	
Per Device			
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	V_F	0.82	V
$I_F = 5 A, T_A = 25^\circ C, \text{ per leg}$		0.70	
Maximum DC Reverse Current at Rated DC Blocking Voltage (Note 3)	I_R	0.05	mA
$T_A = 25^\circ C$		10	
$T_A = 100^\circ C$			
Typical Junction Capacitance (Note 1)	C_J	350	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	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.
3. Pulse Test : Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.

RATINGS AND CHARACTERISTIC CURVES (SP10100)

