

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

FEATURES

- Fast Switching for High Efficiency
- Low Forward Voltage Drop
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability

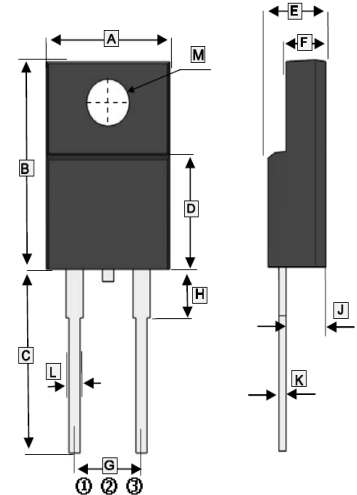
MECHANICAL DATA

- Case: Molded Plastic ITO-220A
- Epoxy: UL 94V-0 Rate Flame Retardant
- Terminals: Solderable per MIL-STD-202 Method 208 Guaranteed
- Polarity: As Marked
- Mounting Position: Any

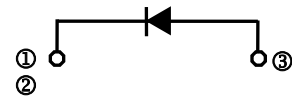
ORDER INFORMATION

Part Number	Type
SP10200S	Lead (Pb)-free
SP10200S-C	Lead (Pb)-free and Halogen-free

ITO-220A



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	9.50	10.70	G	3.60	5.90
B	14.40	15.90	H	3.30	4.50
C	12.70	14.20	J	2.65 TYP.	
D	8.40 TYP.		K	0.40	0.80
E	4.20	5.10	L	0.30	0.90
F	2.50	3.56	M	φ2.60	φ3.80



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

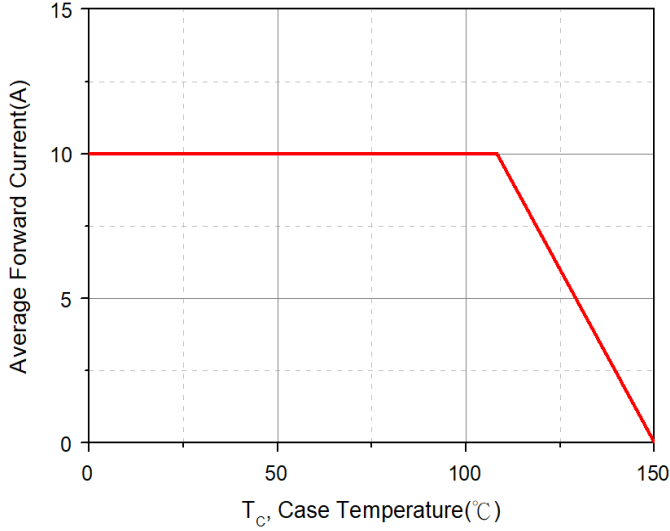
Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Working Peak Reverse Voltage	V_{RSM}	200	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current	I_F	10	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	180	A
Maximum Instantaneous Forward Voltage @ $I_F=10A$	V_F	$T_A=25^\circ C$	0.95
		$T_A=125^\circ C$	0.8
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ C$	0.02
		$T_A=125^\circ C$	9
Typical Junction Capacitance ¹	C_J	350	pF
Typical Thermal Resistance ²	$R_{\theta JC}$	4	°C/W
Voltage Rate Of Change (Rated V_R)	dv/dt	10000	V/ μs
Operating Temperature Range	T_J	-50~150	°C
Storage Temperature Range	T_{STG}	-65~175	

Notes:

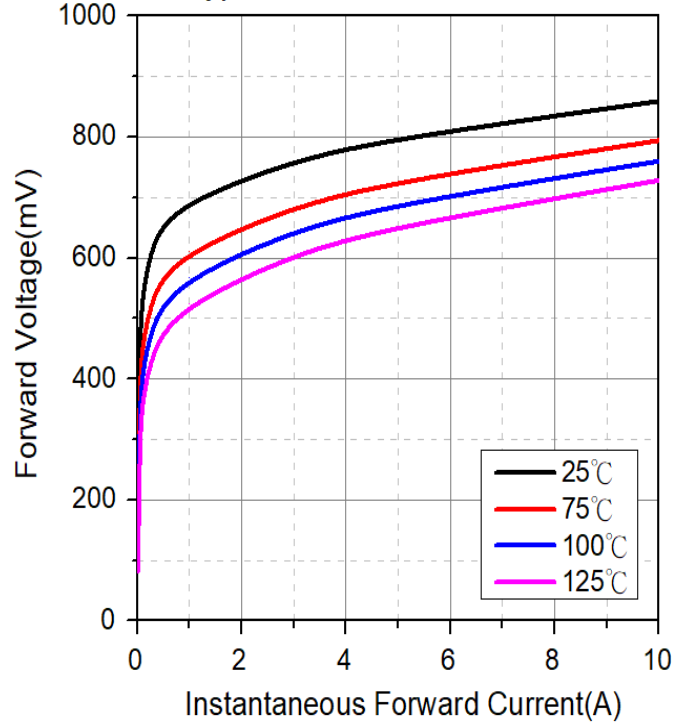
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Thermal Resistance Junction to Case.

RATINGS AND CHARACTERISTICS CURVE

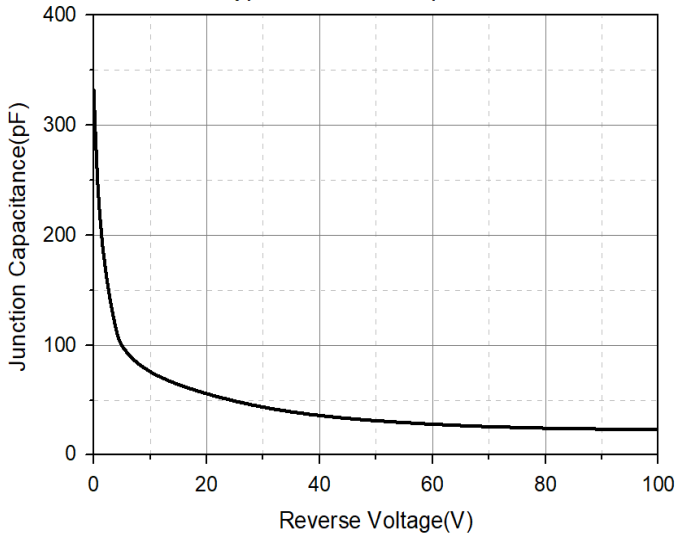
Typical Forward Current Derating Curve



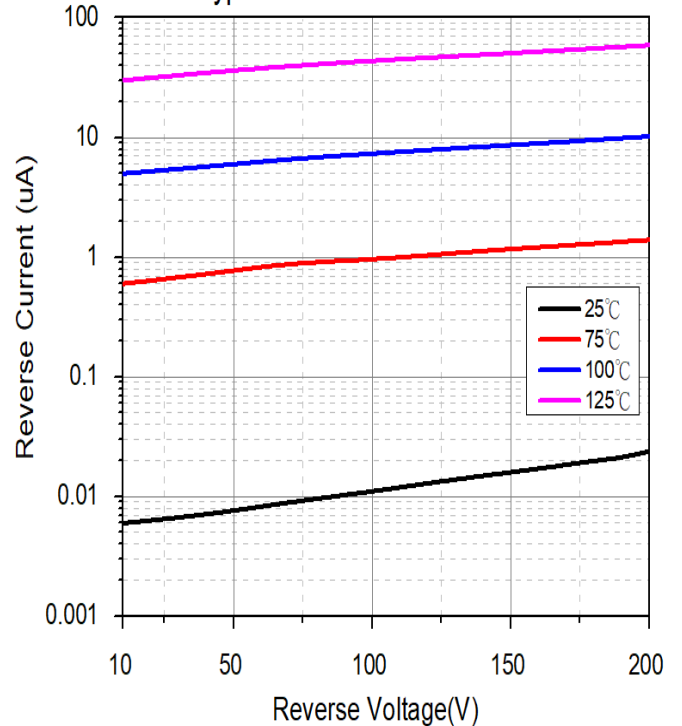
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

