

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

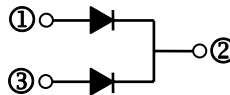
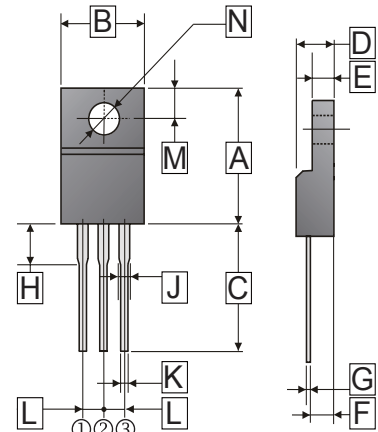
## FEATURES

- Low forward voltage drop
- Low reverse current
- 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 g (Approximate)

### ITO-220



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.60	15.70	H	2.70	3.80
B	9.50	10.50	J	0.90	1.50
C	12.60	14.00	K	0.50	0.90
D	4.30	4.70	L	2.34	2.74
E	2.30	3.2	M	2.40	3.00
F	2.30	2.80	N	∅ 3.0	∅ 3.4
G	0.30	0.70			

## 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%.)

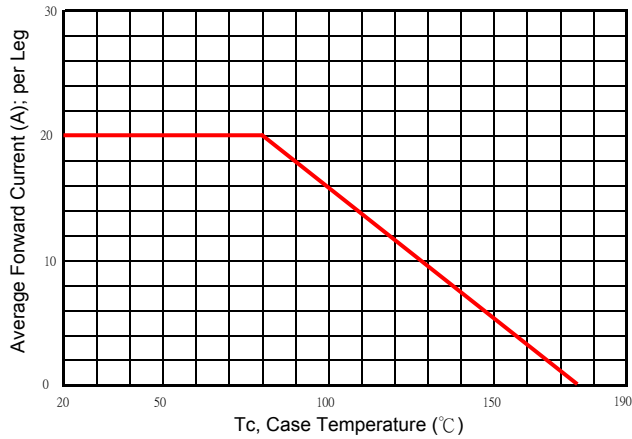
Parameter		Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage		$V_{RRM}$	150	V
Working Peak Reverse Voltage		$V_{RSM}$	150	V
Maximum DC Blocking Voltage		$V_{DC}$	150	V
Maximum Average Forward Rectified Current	(Per Leg)	$I_F$	20	A
	(Per Device)		40	
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)		$I_{FSM}$	300	A
Maximum Instantaneous Forward Voltage	( $I_F = 20\text{ A}$ , $T_J = 25^\circ\text{C}$ , per leg)	$V_F$	0.86	V
	( $I_F = 20\text{ A}$ , $T_J = 100^\circ\text{C}$ , per leg)		0.73	
Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>3</sup>	$T_J = 25^\circ\text{C}$	$I_R$	0.1	mA
	$T_J = 100^\circ\text{C}$		2	
Typical Junction Capacitance <sup>1</sup>		$C_J$	370	pF
Typical Thermal Resistance <sup>2</sup>		$R_{\theta JC}$	4.0	$^\circ\text{C}/\text{W}$
Voltage Rate of Change (Rated $V_R$ )		$dv/dt$	10000	V / $\mu\text{s}$
Operating Temperature Range		$T_J$	-50 ~ 175	$^\circ\text{C}$
Storage Temperature Range		$T_{STG}$	-50 ~ 150	$^\circ\text{C}$

### NOTES:

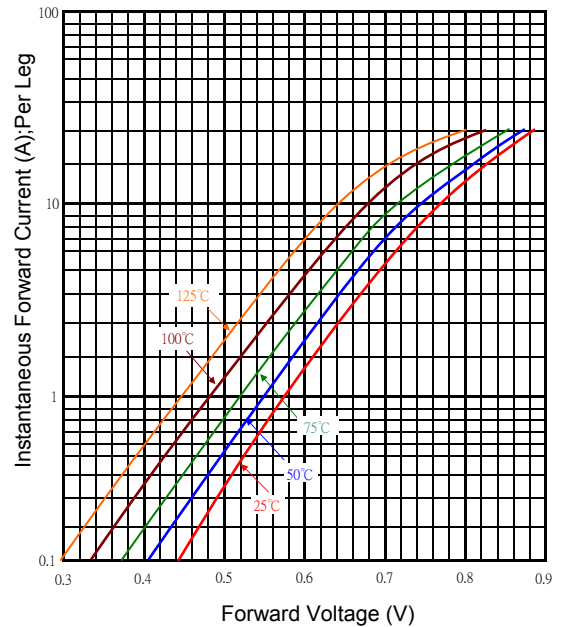
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.
3. Pulse Test : Pulse Width = 300  $\mu\text{s}$ , Duty Cycle  $\leq 2.0\%$ .

**RATINGS AND CHARACTERISTIC CURVES**

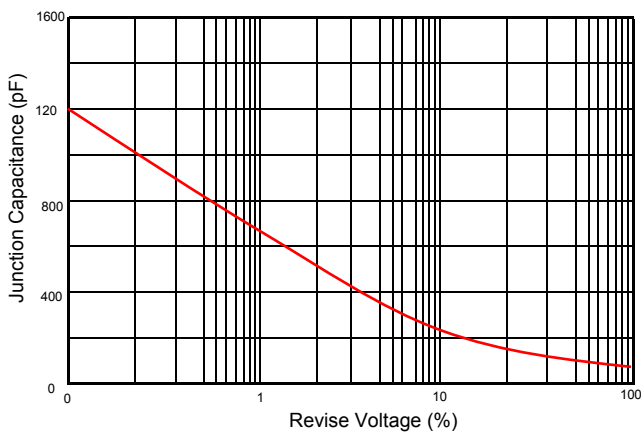
Typical Forward Current Derating Curve



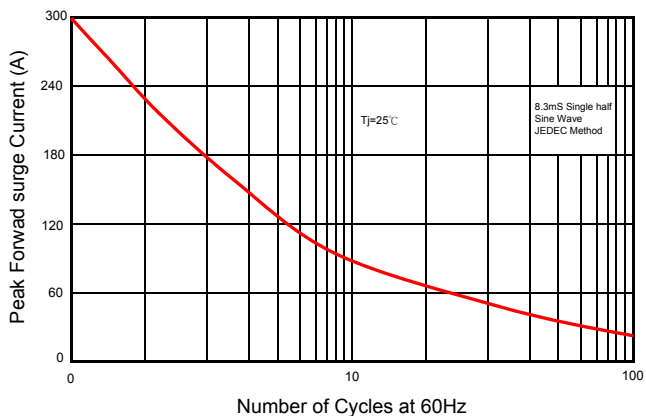
Typical Forward Characteristic



Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic

