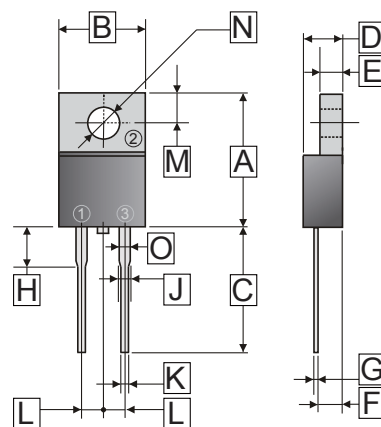


RoHS Compliant Product  
A suffix of "-C" specifies halogen free

**FEATURES**

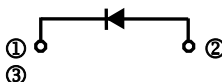
- High Surge Capacity
- 150°C Operating Junction Temperature
- Low Power Loss, High Efficiency
- High-Switching Speed 60 Nanosecond Recovery Time
- Low Forward Voltage, High Current Capability
- Low Stored Charge Majority Carrier Conduction
- Plastic Material Used Carries Underwriters Laboratory Flammability Classification 94V-0

**TO-220A**



Dimensions in millimeters

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.68	15.50	H	3.57	4.03
B	9.7	10.4	J	-	1.30
C	13.06	14.62	K	0.72	0.96
D	4.22	4.98	L	4.84	5.32
E	1.14	1.38	M	2.48	2.98
F	2.20	2.98	N	φ3.7	φ3.9
G	0.27	0.55	O	1.12	1.37



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

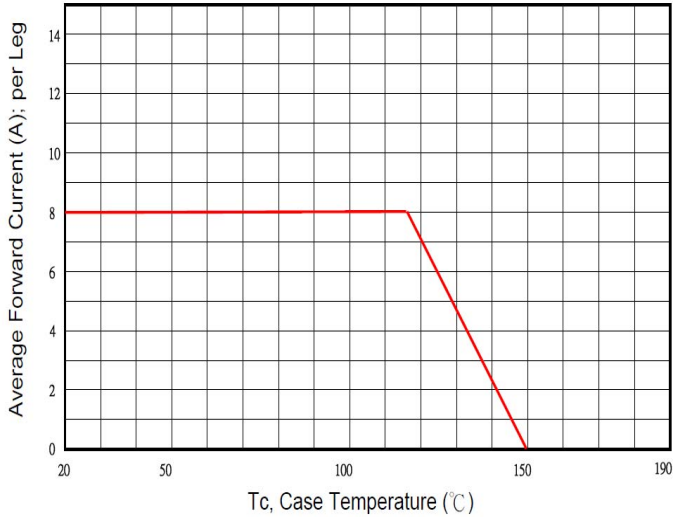
Parameter	Symbol	Ratings	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	600	V
Working Peak Reverse Voltage	$V_{RWM}$	600	V
DC Blocking Voltage	$V_R$	480	V
Average Rectifier Forward Current	$I_{F(AV)}$	8	A
Non-Repetitive Peak Surge Current <sup>1</sup>	$I_{FSM}$	120	A
Maximum Instantaneous Forward Voltage ( $I_F = 8\text{ A}, T_C = 25^\circ\text{C}$ )	$V_F$	1.6	V
Maximum Instantaneous Reverse Current	$I_R$	$T_C = 25^\circ\text{C}$	5
		$T_C = 100^\circ\text{C}$	500
Reverse Recovery Time <sup>2</sup>	$T_{RR}$	50	nS
Typical Junction Capacitance <sup>3</sup>	$C_P$	70	pF
Thermal Resistance	$R_{\theta JC}$	2.5	°C / W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-65~+150	°C

Note:

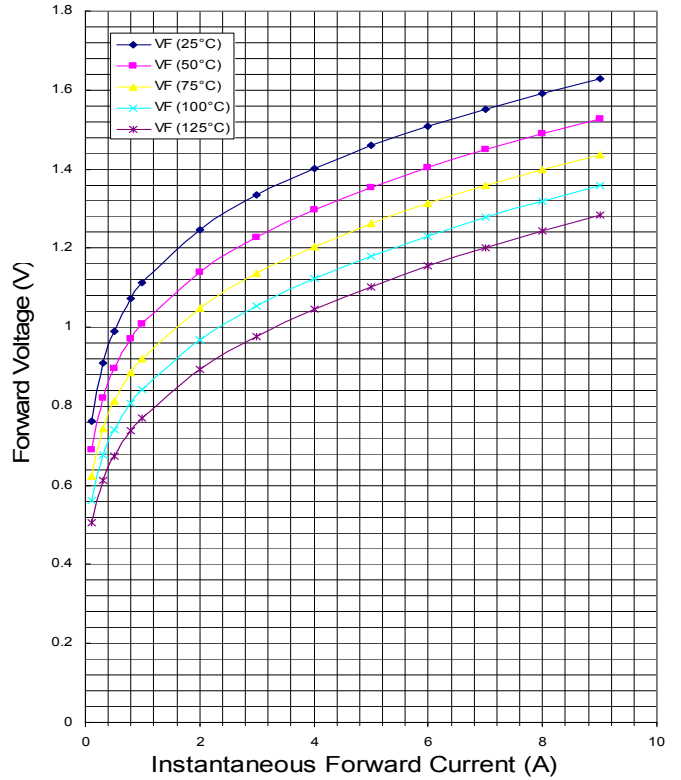
1. Surge applied at rate load conditions half-wave, single phase, 60Hz.
2.  $I_F = 0.5\text{A}, V_R = 30\text{V}, dI_F / dt = 100\text{ A} / \mu\text{s}$ .
3. Reverse Voltage of 4V,  $f = 1\text{MHz}$ .

**RATINGS AND CHARACTERISTIC CURVES**

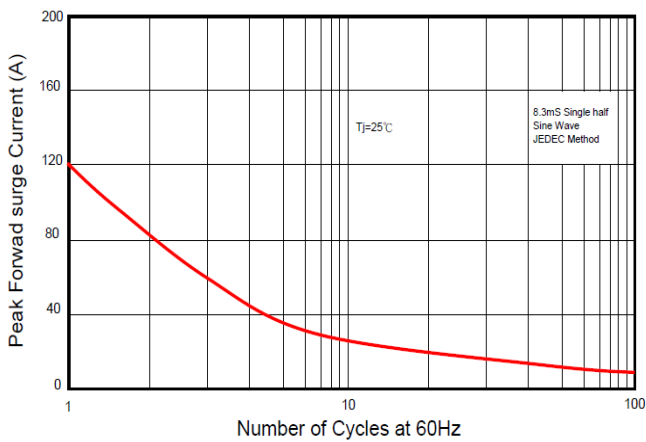
Typical Forward Current Derating Curve



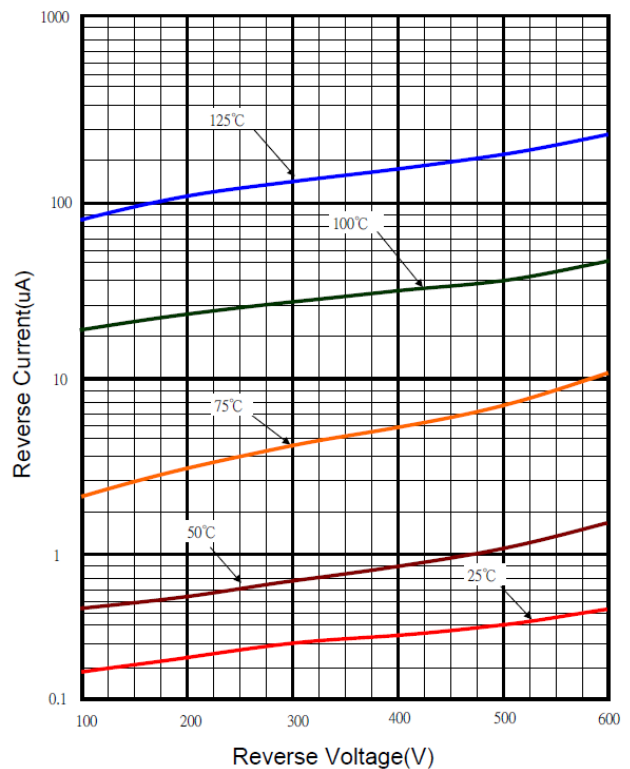
Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

