

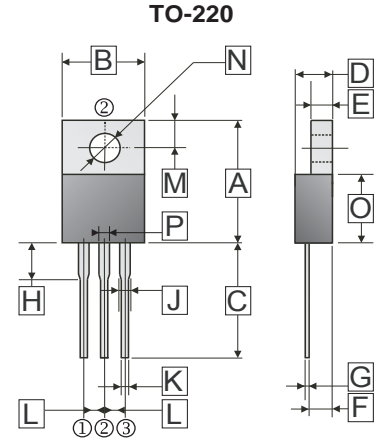
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

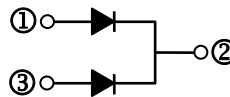
- Low forward voltage drop
- Low reverse current
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

## MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solder able per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.93 grams (approximate)



Dimensions in millimeters



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.22	16.51	J	0.7	1.78
B	9.65	10.67	K	0.38	1.02
C	12.50	14.75	L	2.39	2.69
D	3.56	4.90	M	2.50	3.43
E	0.51	1.45	N	3.10	4.09
F	2.03	2.92	O	8.38	9.65
G	0.31	0.76	P	0.89	1.45
H	3.5	4.5			

## 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%.)

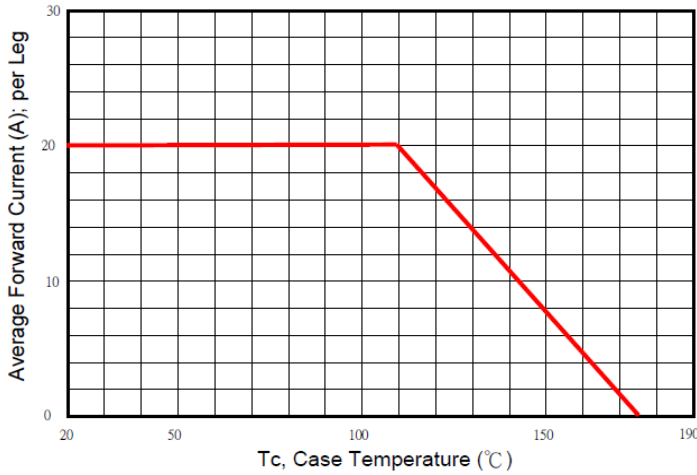
Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	150	V
Working Peak Reverse Voltage	$V_{RSM}$	150	V
Maximum DC Blocking Voltage	$V_{DC}$	150	V
Maximum Average Forward Rectified Current	Per Leg	20	A
	Per Device	40	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	300	A
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=20A, T_A=25^\circ C, \text{ per leg}$	0.86
		$I_F=20A, T_A=100^\circ C, \text{ per leg}$	0.73
Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>3</sup>	$I_R$	$T_A=25^\circ C$	0.1
		$T_A=100^\circ C$	2
Typical Junction Capacitance <sup>1</sup>	$C_J$	370	pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JC}$	2	°C / W
Voltage Rate Of Change (Rated $V_R$ )	$dv / dt$	10000	V / $\mu s$
Operating Temperature Range $T_J$	$T_J$	-50~175	°C
Storage Temperature Range $T_{STG}$	$T_{STG}$	-65~150	°C

Notes:

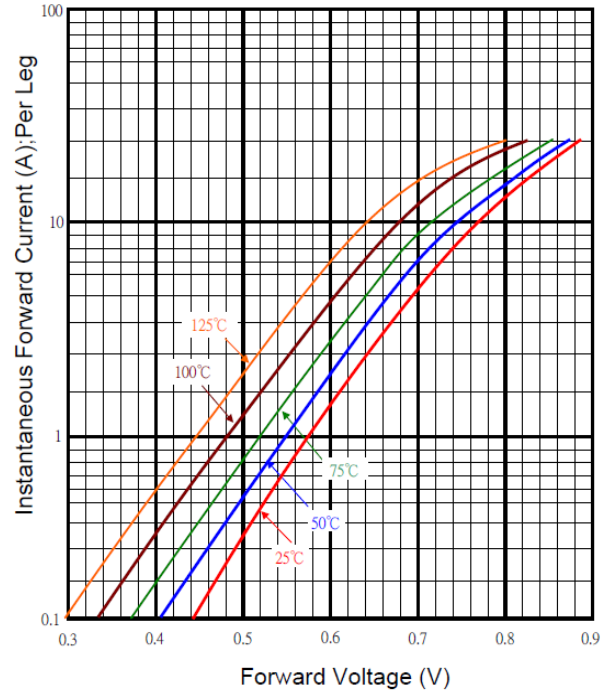
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.
3. Pulse test: 300 $\mu s$  pulse width, 1% duty cycle.

**RATINGS AND CHARACTERISTIC CURVES**

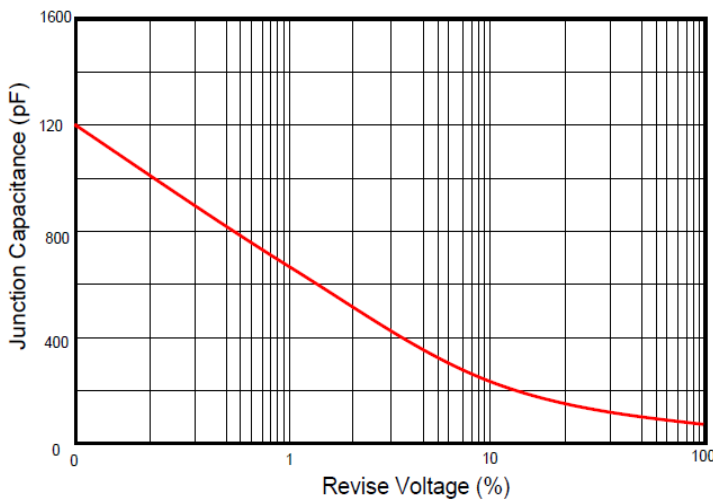
Typical Forward Current Derating Curve



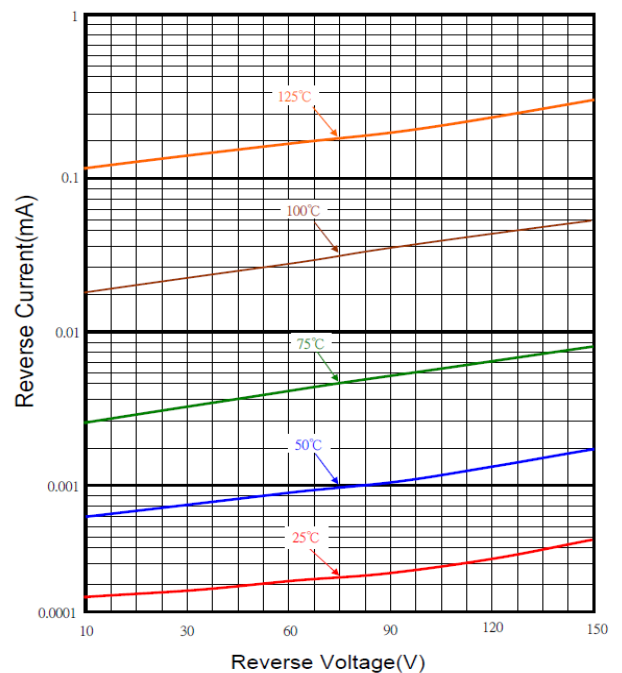
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

