

RoHS compliant product  
A suffix of "-C" specifies halogen free

**FEATURES**

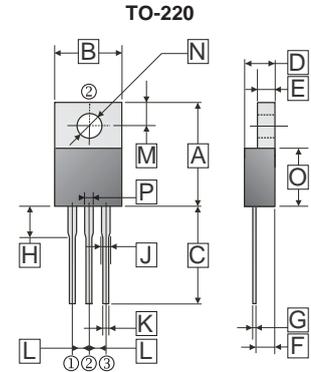
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

**MECHANICAL DATA**

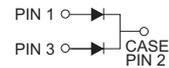
- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.933 grams (Approximately)

**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, derate current by 20%.



Dimensions in millimeters



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.22	16.51	J	1.09	1.78
B	9.65	10.67	K	0.38	1.02
C	12.70	14.73	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	4.93 (TYP)				

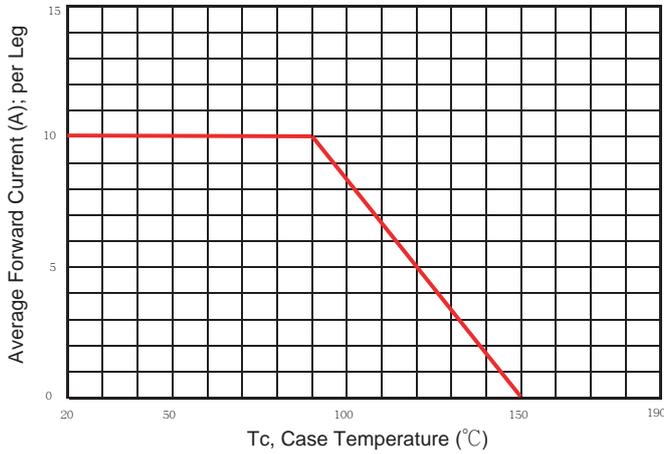
TYPE NUMBER	SYMBOL	VALUES	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	45	V
Working Peak Reverse Voltage	$V_{RSM}$	45	V
Maximum DC Blocking Voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current See Fig. 1	$I_F$	20	A
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)	$I_{FSM}$	180	A
Maximum Instantaneous Forward Voltage ( $I_F = 10$ Amps)	$V_F$	0.59	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$	$I_R$	0.5	mA
		15	mA
Typical Junction Capacitance (Note 1)	$C_J$	700	pF
Typical Thermal Resistance $R_{\theta JC}$ (Note 2)	$R_{\theta JA}$	3.0	$^\circ\text{C/W}$
Operating Temperature Range $T_J$	$T_J$	-50 ~ +150	$^\circ\text{C}$
Storage Temperature Range $T_{STG}$	$T_{STG}$	-65 ~ +175	$^\circ\text{C}$

NOTES:

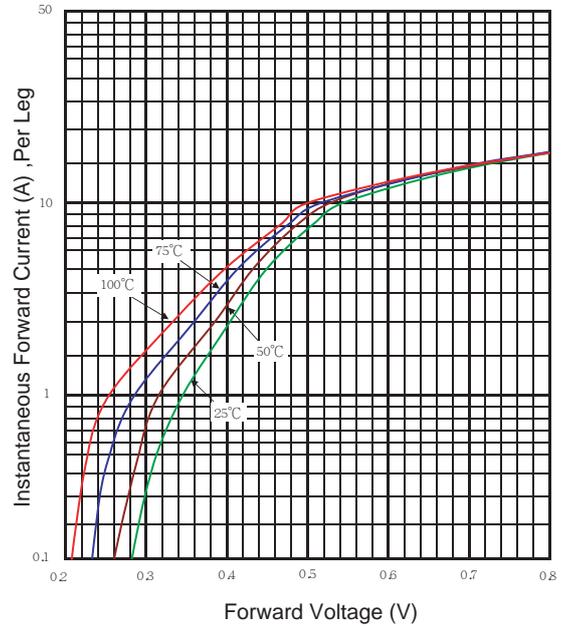
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient

**RATINGS AND CHARACTERISTIC CURVES**

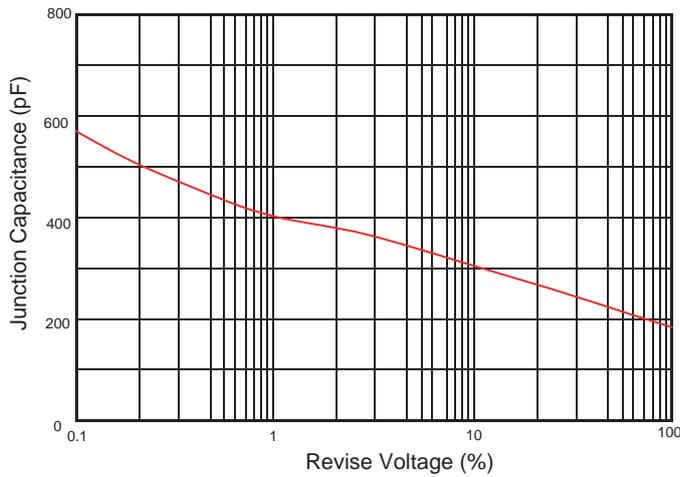
Typical Forward Current Derating Curve



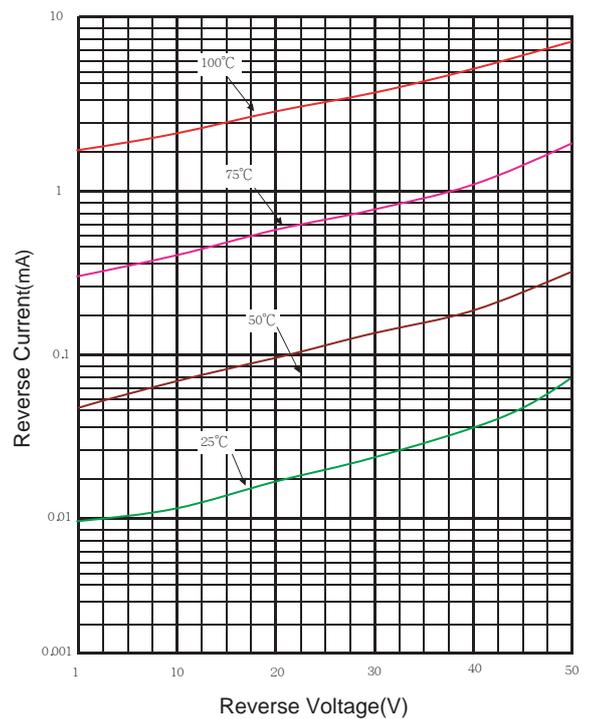
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

