

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

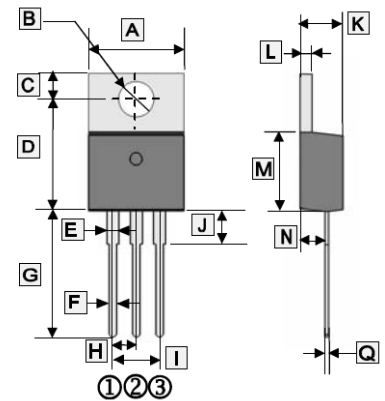
FEATURES

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

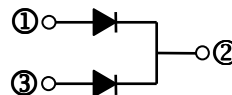
MECHANICAL DATA

- 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: 1.98 grams (approximate)

TO-220J



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	9.57	10.57	I	4.68	5.48
B	3.54	4.14	J	2.95	3.96
C	2.54	2.94	K	4.27	4.87
D	11.86	13.26	L	1.07	1.47
E	0.97	1.57	M	8.0	10.0
F	0.51	1.11	N	2.03	2.92
G	12.7	13.8	Q	0.30	0.65
H	2.540 TYP.				



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}	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	I_F	10	A
(Per Leg)		20	
Peak Forward Surge Current, 8.3 ms single half sine-wave	I_{FSM}	150	A
Power dissipation	P_D	2.5	W
Typical Thermal Resistance	$R_{\theta JA}$	50	°C /W
Typical Thermal Resistance	$R_{\theta JC}$	2	°C /W
Operating and Storage Temperature Range	T_J, T_{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS

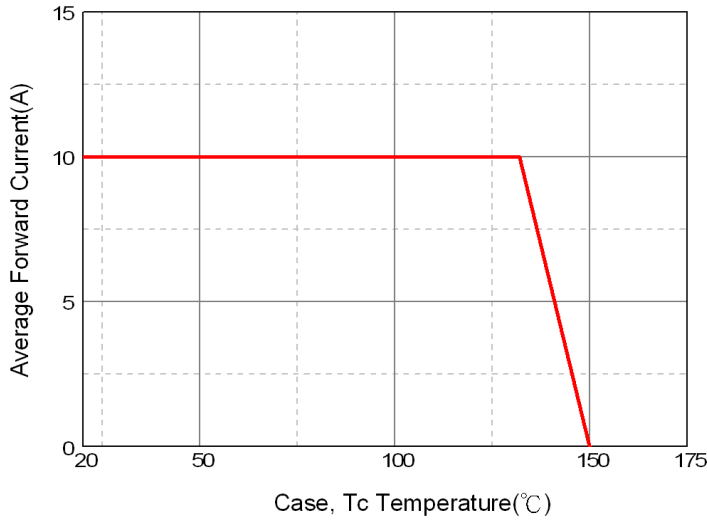
Parameter	Symbol	MIN.	Typ.	Max.	Unit	Test Condition
Reverse voltage	V_{BR}	100	-	-	V	
Maximum Instantaneous Forward Voltage	V_F	-	0.79	0.86	V	$I_F=10A, T_J=25^\circ C$
Maximum DC Reverse Current at Rated DC Blocking Voltage ²	I_R	-	-	0.1	mA	$V_R=100V, T_J=25^\circ C$
Typical Junction Capacitance ¹	C_J	-	90	-	pF	

NOTES:

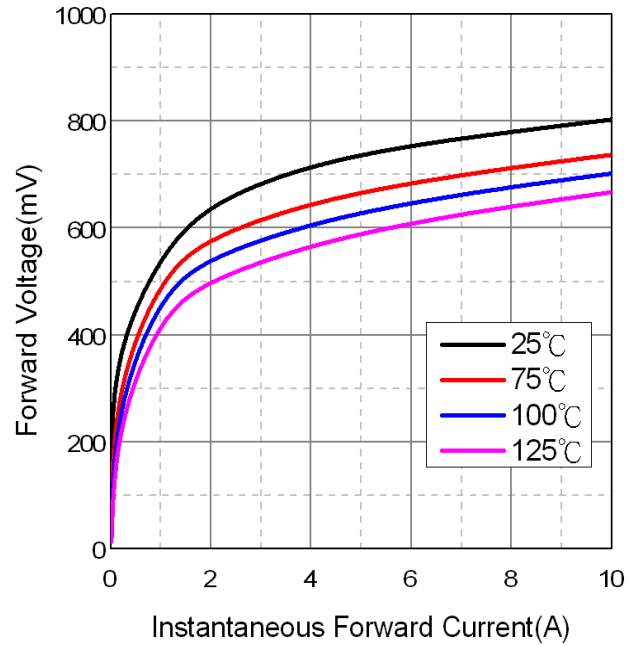
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300 μs , Duty Cycle \leq 2.0%.

RATINGS AND CHARACTERISTIC CURVES

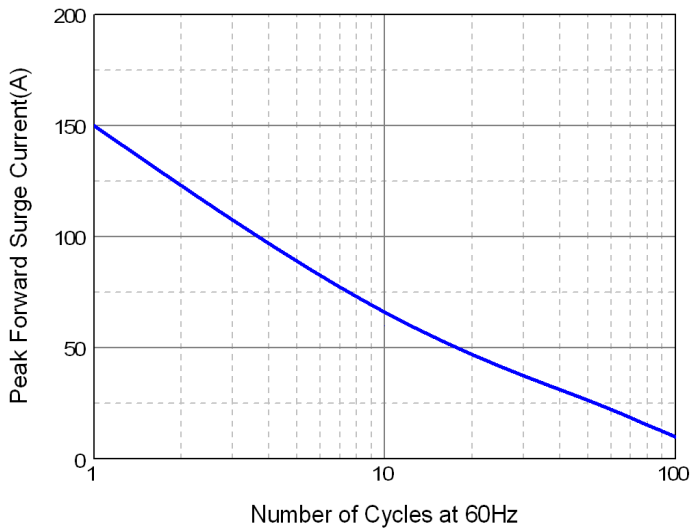
Typical Forward Current Derating Curve



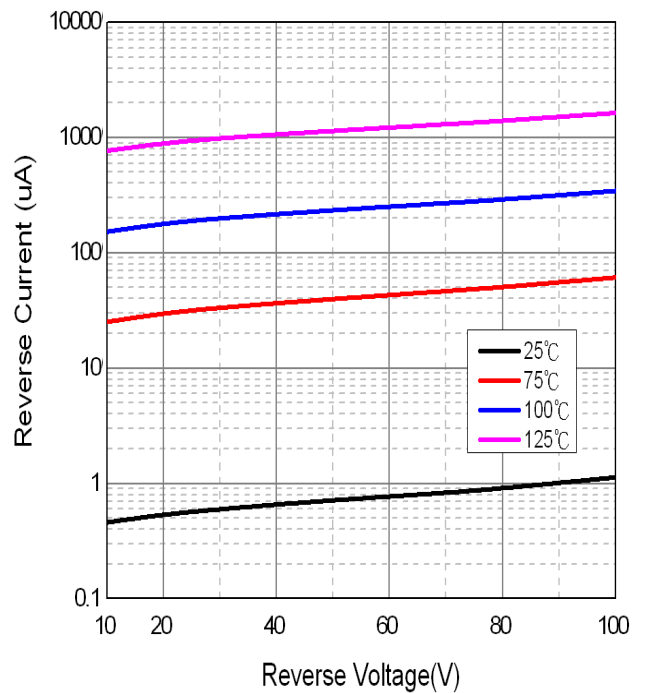
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

