

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

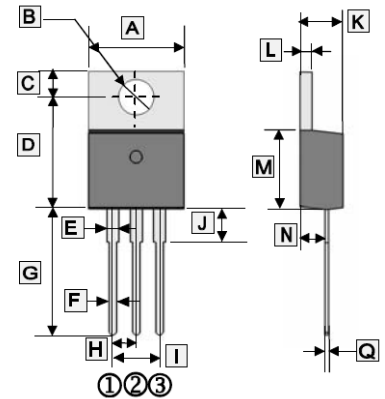
FEATURES

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

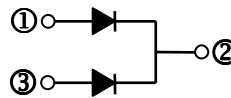
MECHANICAL DATA

- 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

TO-220J



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	10.010	10.350	I	4.980	5.180
B	3.735	3.935	J	3.560	3.960
C	2.590	2.890	K	4.470	4.670
D	12.060	12.460	L	1.200	1.400
E	1.170	1.370	M	8.500	8.900
F	0.710	0.910	N	2.520	2.820
G	13.400	13.800	Q	0.330	0.650
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}	150	V
Working Peak Reverse Voltage	V_{RWM}	150	V
Maximum DC Blocking Voltage	V_{DC}	150	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}	180	A
Power dissipation	P_D	2	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

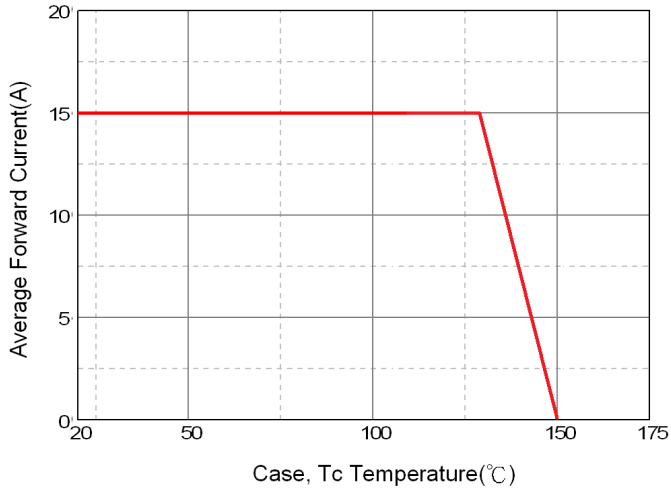
Parameter	Symbol	MIN.	Typ.	Max.	Unit	Test Condition
Reverse voltage	V_{BR}	150	-	-	V	
Maximum Instantaneous Forward Voltage	V_F	-	0.83	0.89	V	$I_F=10A, T_J=25^\circ C$
		-	0.73	-		$I_F=10A, T_J=100^\circ C$
Maximum DC Reverse Current at Rated DC Blocking Voltage ²	I_R	-	-	0.5	mA	$V_R=150V, T_J=25^\circ C$
		-	-	2		$V_R=150V, T_J=100^\circ C$
Typical Junction Capacitance ¹	C_J	-	90	-	pF	

NOTES:

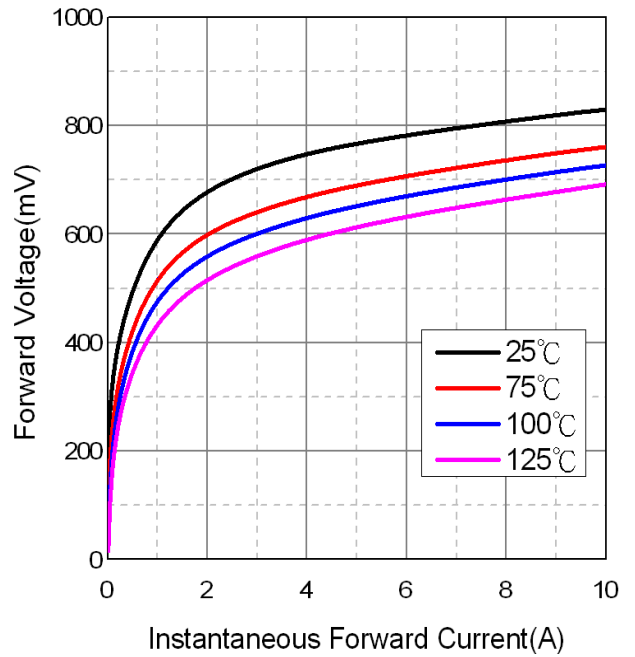
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300 μs , Duty Cycle \leq 2.0%.

RATINGS AND CHARACTERISTIC CURVES

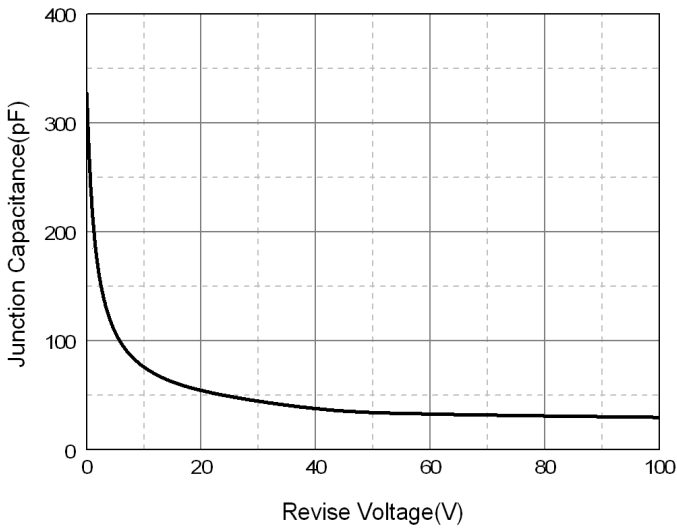
Typical Forward Current Derating Curve



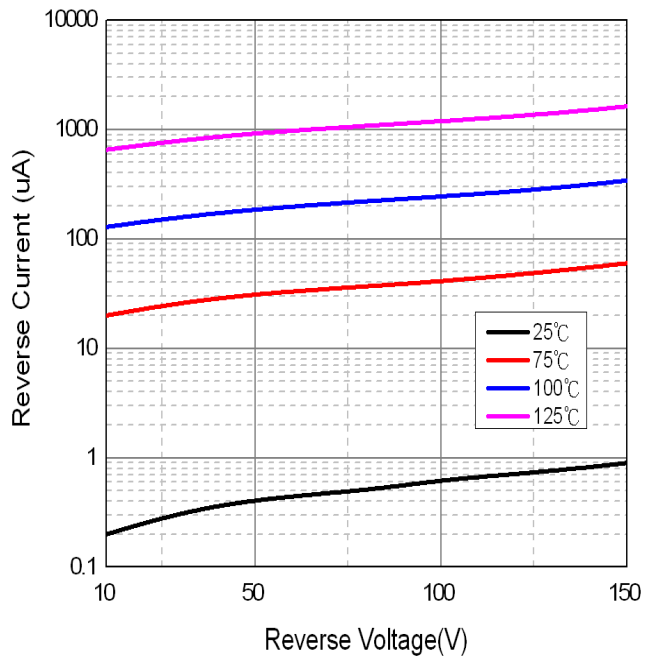
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

