

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

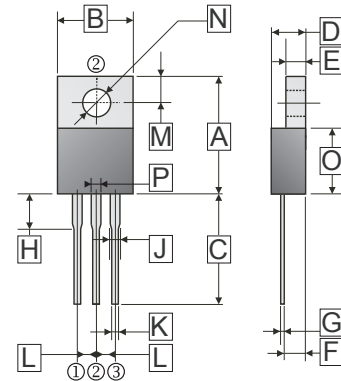
FEATURES

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

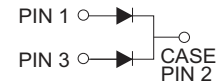
MECHANICAL DATA

- 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: 2.064 grams (approximate)

TO-220



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%.)

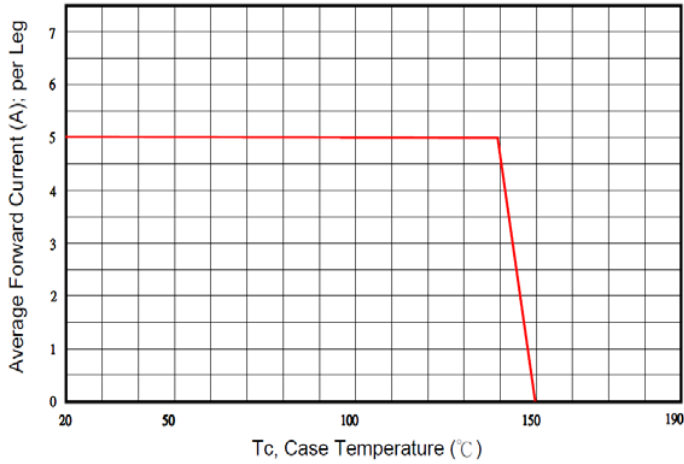
Parameter		Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RSM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current	Per Leg	I_F	5	A
	Per Device		10	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	130	A
Maximum Instantaneous Forward Voltage	$I_F=5A, T_A=25^\circ C$, per leg	V_F	0.82	V
	$I_F=5A, T_A=125^\circ C$, per leg		0.7	
Maximum DC Reverse Current at Rated DC Blocking Voltage ⁴	$T_A = 25^\circ C$	I_R	0.05	mA
	$T_A = 100^\circ C$		10	
Typical Junction Capacitance ¹		C_J	350	pF
Typical Thermal Resistance ²		$R_{\theta JC}$	2	°C / W
Typical Thermal Resistance ³		$R_{\theta JA}$	10	°C / W
Voltage Rate Of Change (Rated V_R)		dv / dt	10000	V / μs
Operating Temperature Range T_J		T_J	-50~150	°C
Storage Temperature Range T_{STG}		T_{STG}	-65~175	°C

Notes:

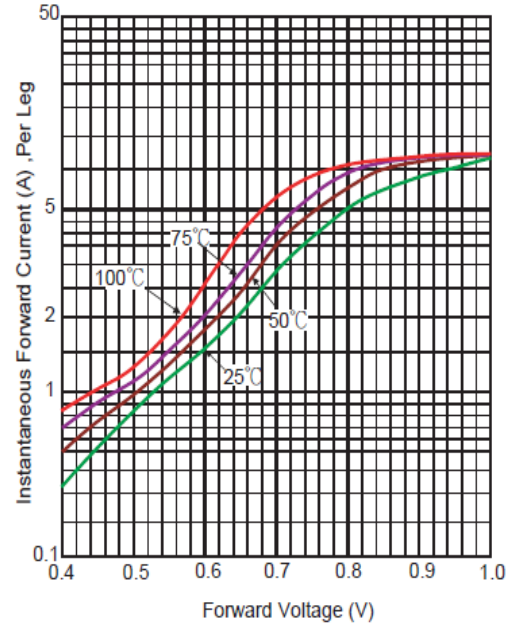
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.
3. Thermal Resistance Junction to Ambient.
4. Pulse test: 300 μs pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

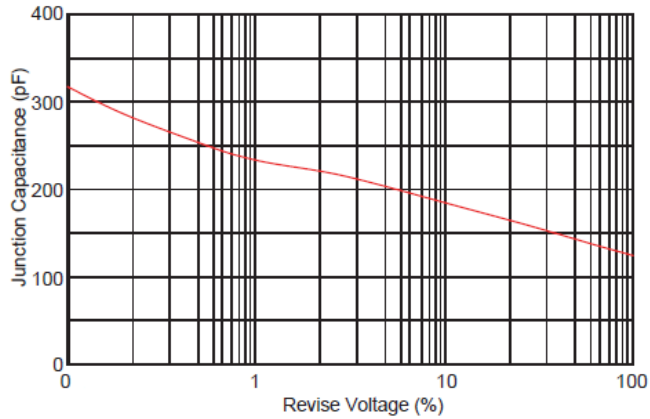
Typical Forward Current Derating Curve



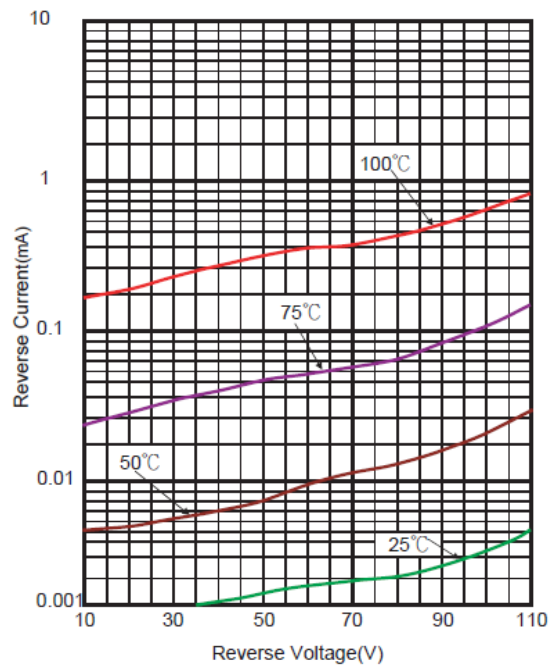
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

