

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

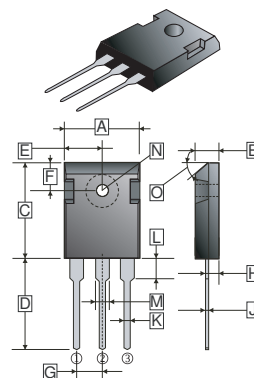
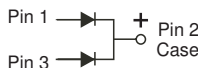
TO-247

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: 6.1 grams (Approximately)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	15.38	16.20	H	1.98 REF.	
B	4.20	5.36	J	0.45	0.85
C	20.63	22.38	K	2.80	3.10
D	-	21.50	L	-	4.50
E	7.87	8.13	M	2.92	3.23
F	4.32	7.20	N	3.25 Ø	3.65 Ø
G	5.20	5.70	O		30°

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%.

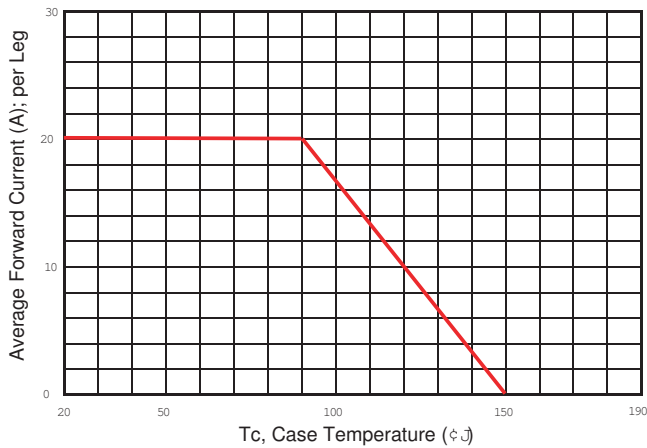
TYPE NUMBER		SYMBOL	VALUES	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RSM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current, See Fig. 1	Per Leg	I_F	20	A
	Per Device		40	
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)		I_{FSM}	250	A
Maximum Instantaneous Forward Voltage ($I_F=20$ A, $T_A=25^\circ\text{C}$, per leg)		V_F	0.87	V
Maximum Instantaneous Forward Voltage ($I_F=20$ A, $T_A=125^\circ\text{C}$, per leg)			0.70	
Maximum DC Reverse Current at Rated DC Blocking Voltage		I_R	$T_A = 25^\circ\text{C}$ 0.05	mA
			$T_A = 125^\circ\text{C}$ 12	
Typical Junction Capacitance (Note 1)		C_J	500	pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	2.0	°C / W
Voltage Rate of Change (Rated V_R)		dv / dt	10000	V / μs
Operating Temperature Range		T_J	-50 ~ +150	°C
Storage Temperature Range		T_{STG}	-65 ~ +175	°C

NOTES:

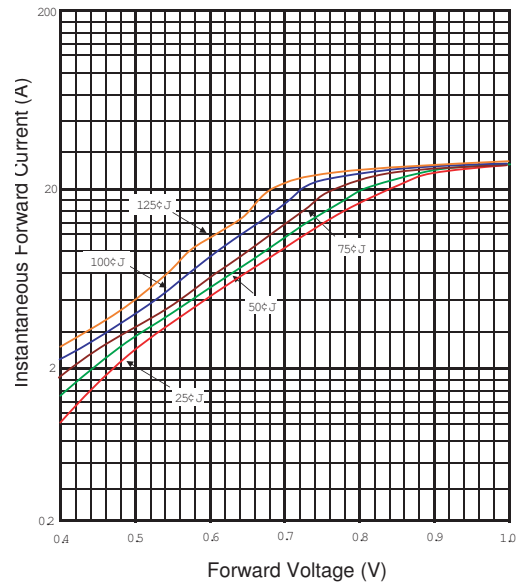
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

RATINGS AND CHARACTERISTIC CURVES

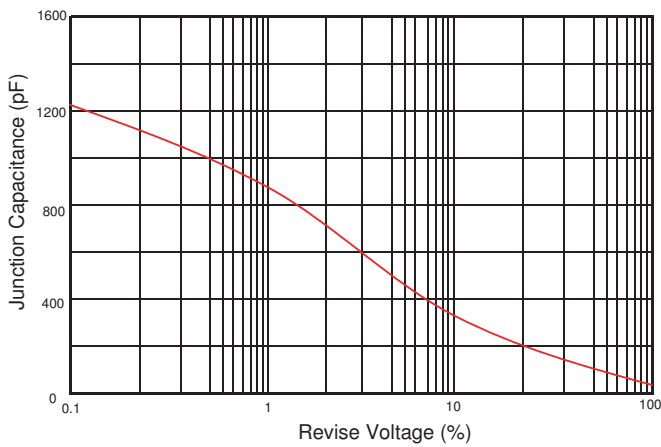
Typical Forward Current Derating Curve



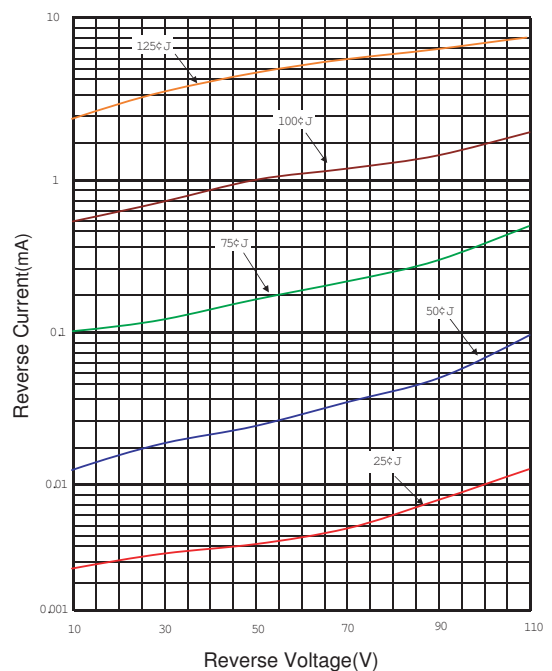
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

