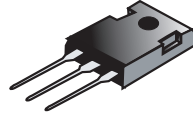


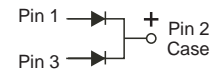
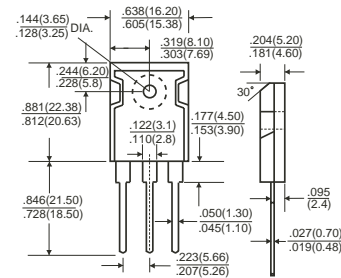
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

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



## TO-247 (TO-3P)



## 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)

## 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%.

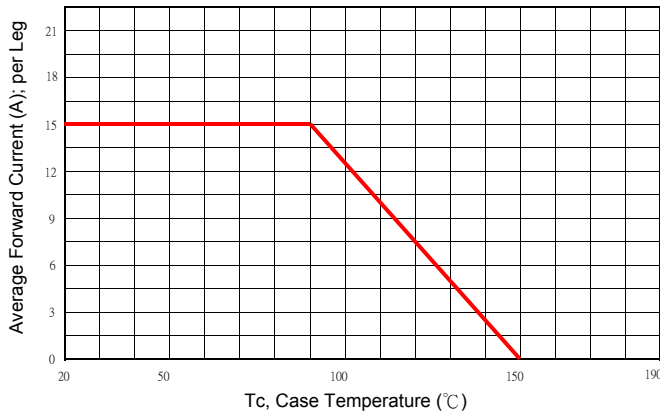
TYPE NUMBER	SYMBOL	VALUES	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	V
Working Peak Reverse Voltage	$V_{RSM}$	40	V
Maximum DC Blocking Voltage	$V_{DC}$	40	V
Maximum Average Forward Rectified Current (Per Leg)	$I_F$	15	A
(Per Device)		30	
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)	$I_{FSM}$	180	A
Maximum Instantaneous Forward Voltage ( $I_F=15$ A, $T_A=25^\circ\text{C}$ , per leg)	$V_F$	0.57	V
Maximum Instantaneous Forward Voltage ( $I_F=15$ A, $T_A=125^\circ\text{C}$ , per leg)		0.52	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A = 25^\circ\text{C}$ 0.5	mA
		$T_A = 100^\circ\text{C}$ 12	
Typical Junction Capacitance (Note 1)	$C_J$	2400	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.0	$^\circ\text{C} / \text{W}$
Voltage Rate of Change (Rated $V_R$ )	$dv / dt$	10000	$\text{V} / \mu\text{s}$
Operating Temperature Range	$T_J$	-50 ~ +150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 ~ +175	$^\circ\text{C}$

### NOTES:

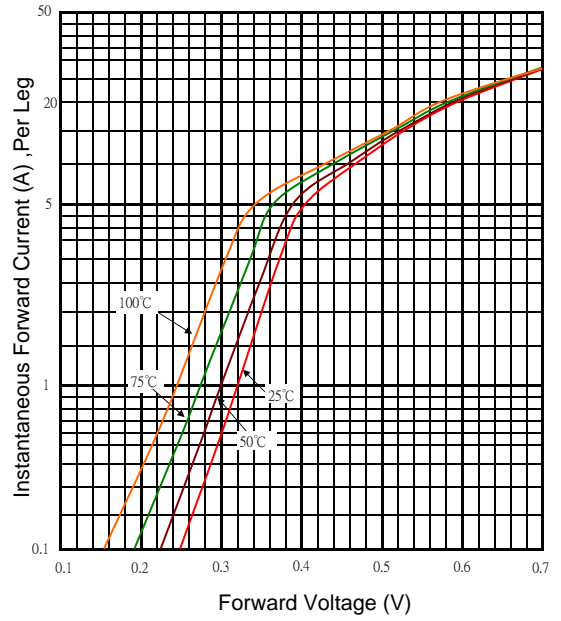
1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
2. Thermal Resistance Junction to Case.

**RATING AND CHARACTERISTIC CURVES**

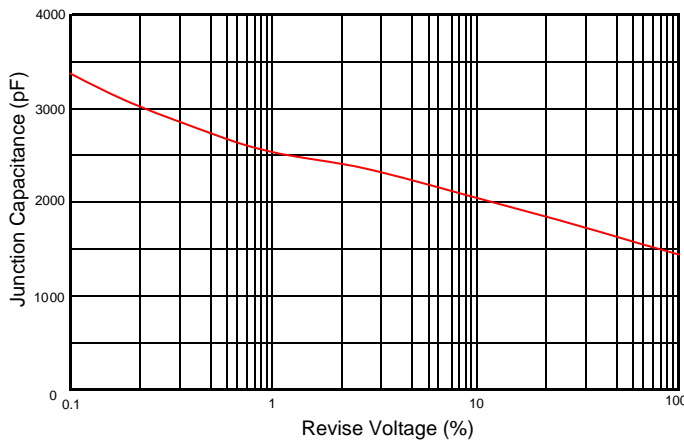
Typical Forward Current Derating Curve



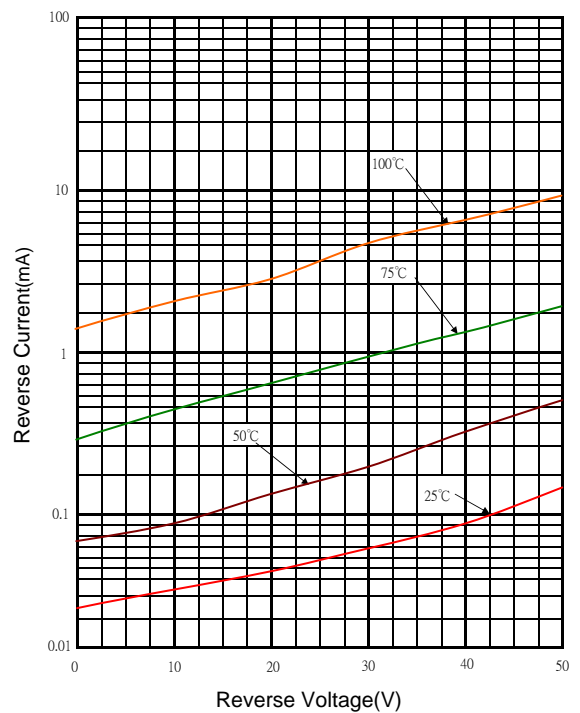
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

