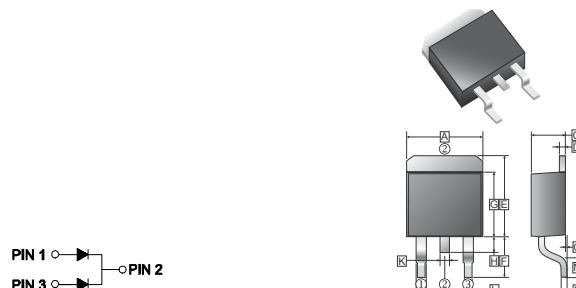


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

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

**TO-263(D<sup>2</sup>-PACK)**



## 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: 2.24 grams

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	9.50	10.50	H	1.50	REF.
C	4.30	4.80	J	2.54	TYP.
D	1.17	1.45	K	-	-
E	9.50	10.50	L	0.71	1.00
F	4.33	5.93	M	1.17	1.47
G	8.50	9.00	P	0.31	0.53

## MAXIMUM RATINGS

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%.

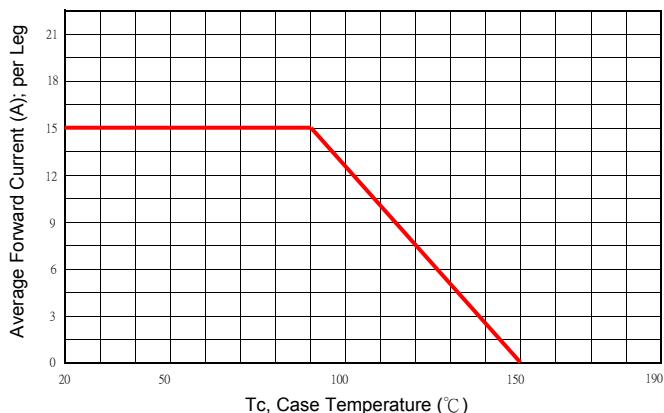
PARAMETER	SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	60	V
Maximum Average Forward Rectified Current	I <sub>F</sub>	30	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	180	A
Maximum Instantaneous Forward Voltage @ 15A	V <sub>F</sub>	0.72	V
Maximum Reverse Current at Rated VR Per Diode (Note 3)	I <sub>R</sub>	0.5	mA
		12	
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	1700	pF
Voltage Rate Of Change	dv/dt	10000	V/us
Typical Thermal Resistance	R <sub>θJA</sub>	50	°C/W
	R <sub>θJC</sub>	3.0	°C/W
Operating & Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-55~150	°C

### NOTES:

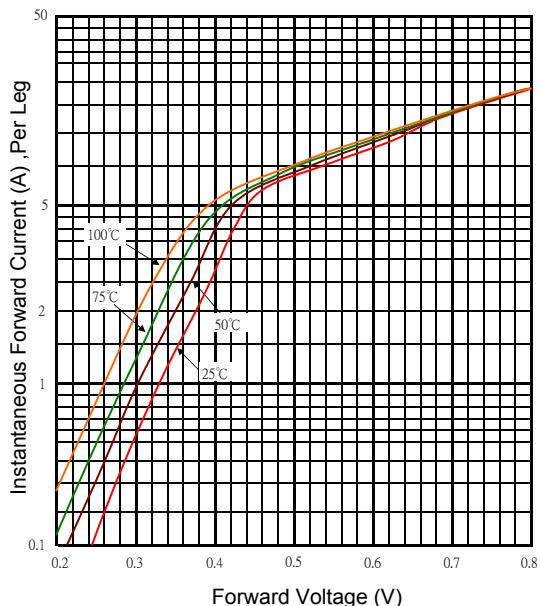
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.
3. Pulse test: Pulse width 40ms.

## RATINGS AND CHARACTERISTIC CURVES

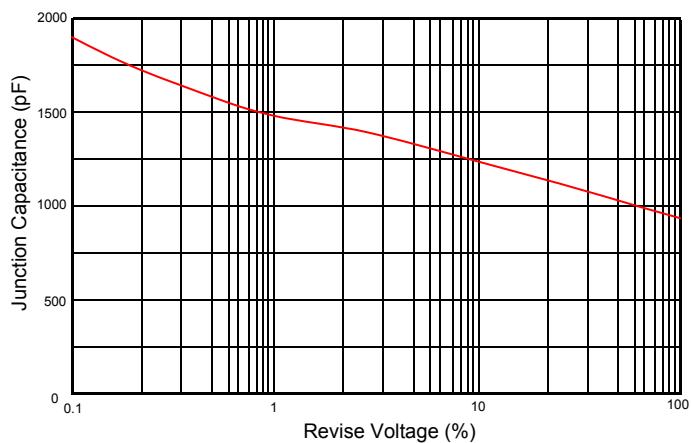
Typical Forward Current Derating Curve



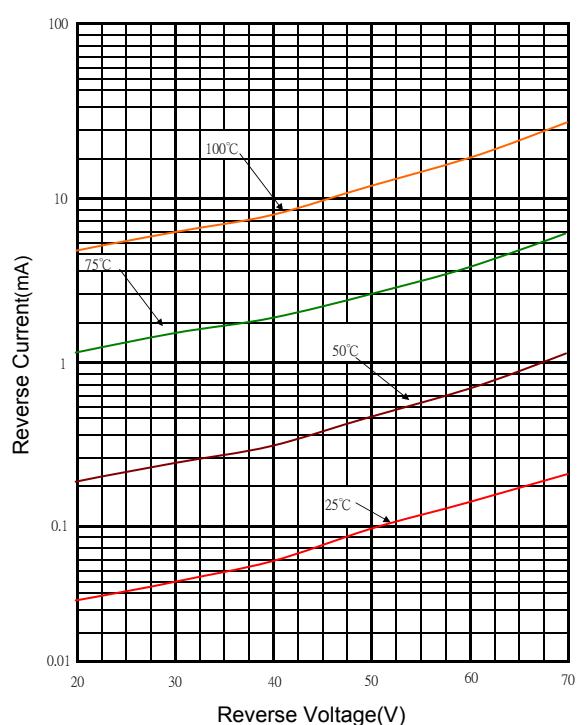
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

