

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

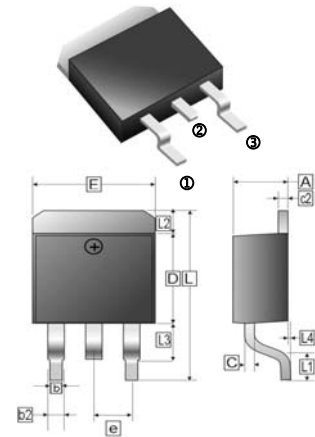
### FEATURES

- 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: 2.24 grams

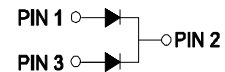
### TO-263(D<sup>2</sup>-PACK)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.00	4.85	c2	1.10	1.65
b	0.51	1.00	b2	1.34	REF
L4	0.00	0.30	D	8.0	9.65
C	0.30	0.74	e	2.54	REF
L3	1.50	REF	L	14.6	15.88
L1	1.78	2.79	L2	1.27	REF
E	9.60	10.67			

### PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-263	0.8K	13 inch



### 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%.)

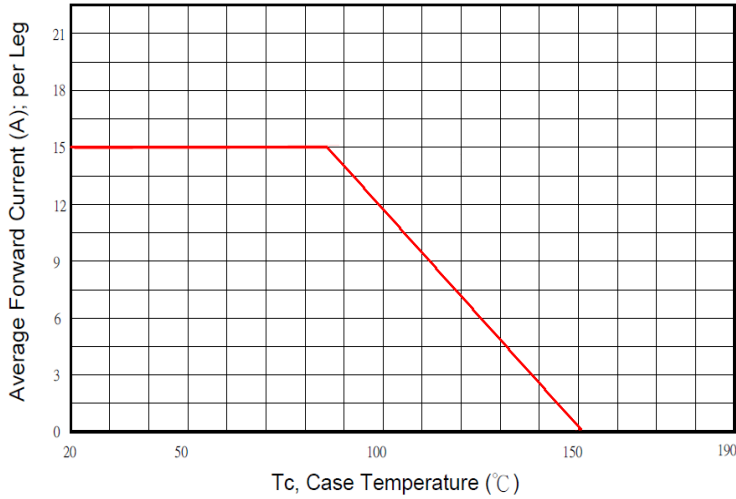
PARAMETER	SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Rectified Current	$I_F$	30	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	180	A
Maximum Instantaneous Forward Voltage @ 15A	$V_F$	0.72	V
Maximum Reverse Current at Rated VR Per Diode <sup>3</sup>	$T_A=25^\circ\text{C}$	0.5	mA
	$T_A=100^\circ\text{C}$	12	
Typical Junction Capacitance <sup>1</sup>	$C_J$	1700	pF
Voltage Rate Of Change	dv/dt	10000	V/us
Typical Thermal Resistance <sup>2</sup>	$R_{\theta Jc}$	6	°C/W
Operating & Storage Temperature	$T_J, T_{STG}$	-55~150	°C

#### NOTES:

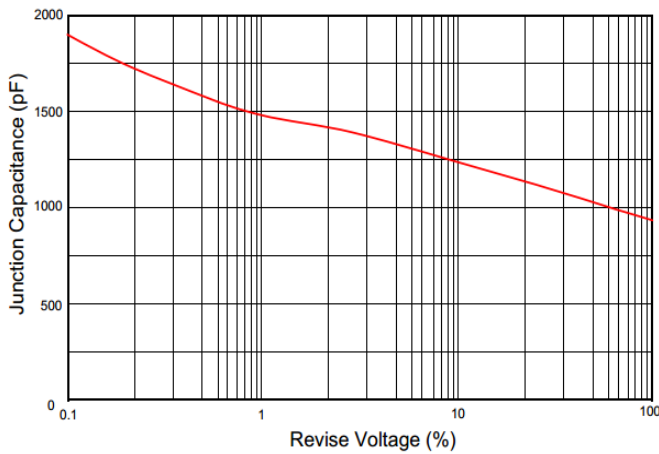
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case. FR4 Board Heat sink size: 10\*10\*0.2mm.
3. Plus test: 300µs Pulse width, 1% duty cycle.

**RATINGS AND CHARACTERISTIC CURVES**

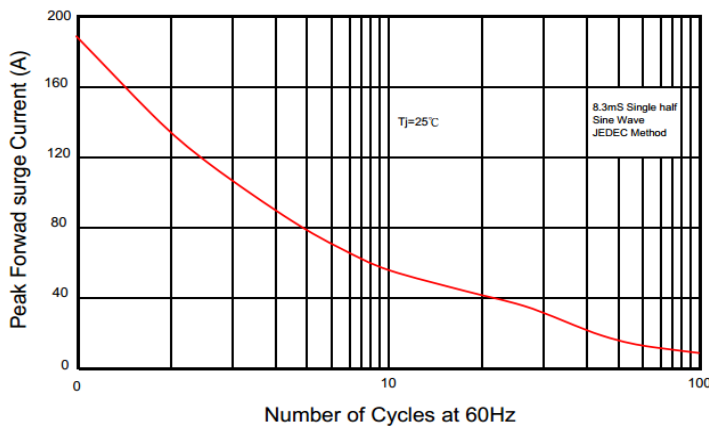
Typical Forward Current Derating Curve



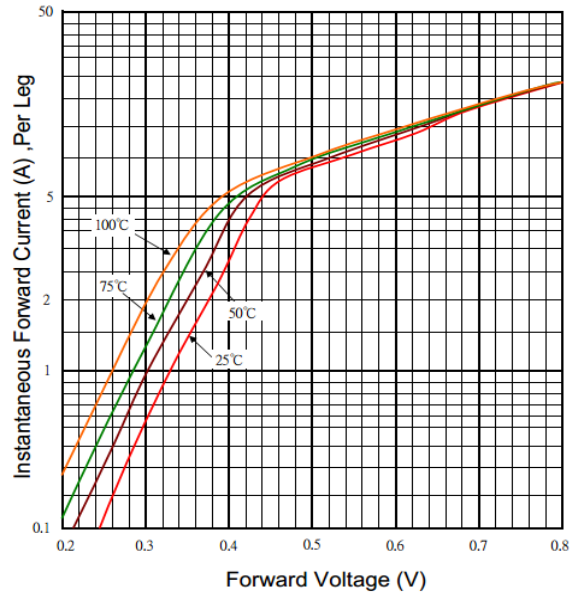
Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Forward Characteristic



Typical Reverse Characteristic

