

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

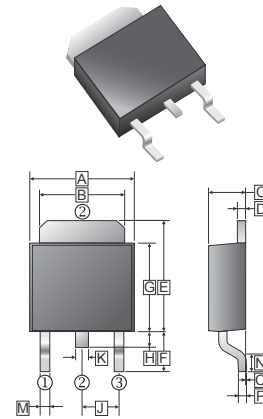
FEATURES

- 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
- Polarity: As Marked
- Mounting position: Any
- Weight: 0.7 grams

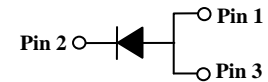
TO-252 (D-Pack)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.90	J	2.30	REF.
B	4.95	5.50	K	0.64	1.14
C	2.10	2.50	M	0.50	1.14
D	0.43	0.9	N	1.3	1.8
E	6.0	7.5	O	0	0.13
F	2.80	REF.	P	0.58	REF.
G	5.40	6.40			
H	0.60	1.20			

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch



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%.)

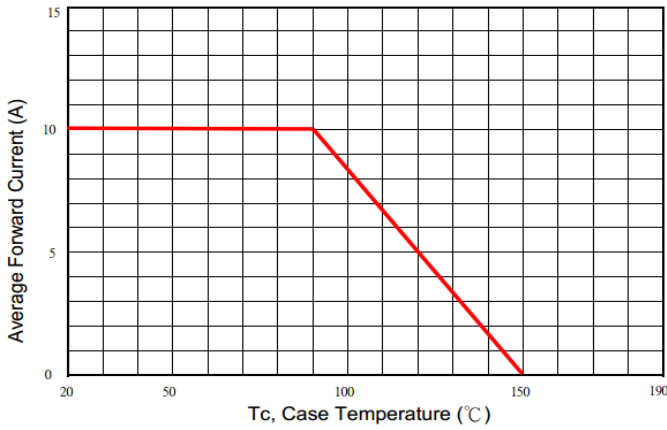
Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RSM}	40	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current	I_F	10	A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage @10A	V_F	$T_A=25^\circ C$	0.58
		$T_A=125^\circ C$	0.53
Maximum DC Reverse Current at Rated DC Blocking Voltage ³	I_R	$T_A=25^\circ C$	0.3
		$T_A=125^\circ C$	15
Typical Junction Capacitance ¹	C_J	450	pF
Voltage Rate of Change (Rated VR)	dv/dt	10000	V/uS
Typical Thermal Resistance ²	$R_{\theta JC}$	10	°C / W
Operating & Storage Temperature	T_J, T_{STG}	-55~150	°C

Note:

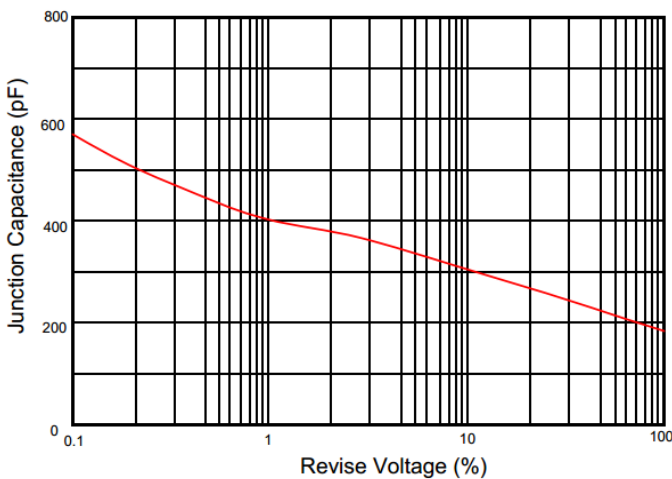
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case, FR4 Board Heat sink size: 10*10*0.2mm.
3. Pulse Test : Pulse Width $\leq 300\mu s$ Duty Cycle $\leq 2\%$

RATINGS AND CHARACTERISTIC CURVES

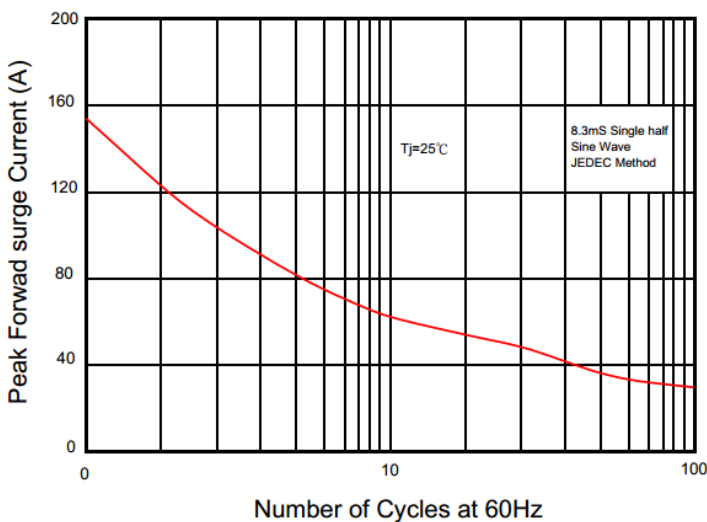
Typical Forward Current Derating Curve



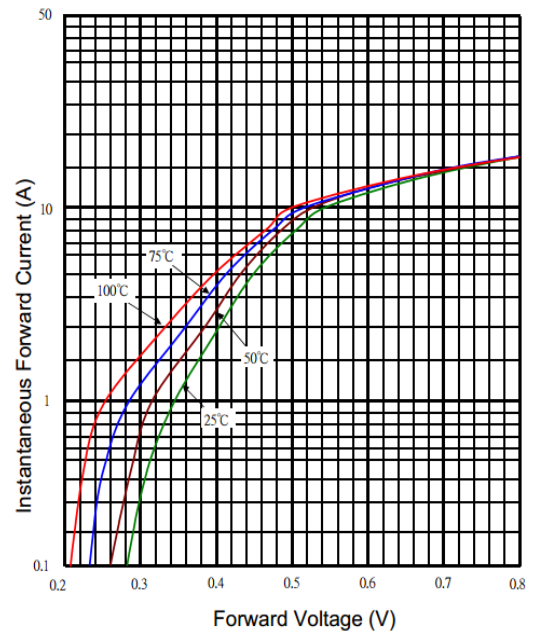
Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Forward Characteristic



Typical Reverse Characteristic

