

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

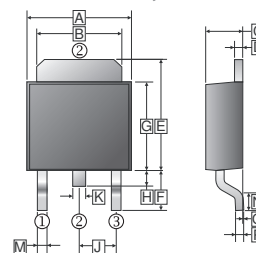
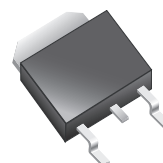
FEATURES

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

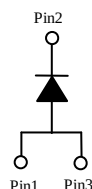
MECHANICAL DATA

- 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

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			



Configuration

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	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%.)

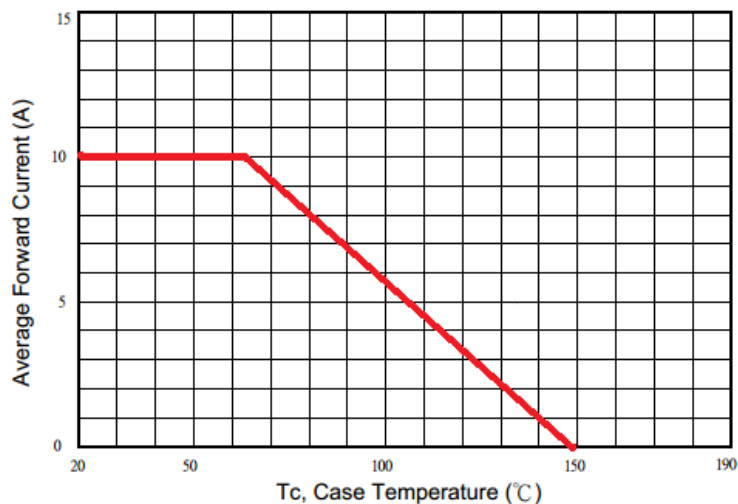
PARAMETER		SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Maximum RMS Voltage		V_{RMS}	70	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current		I_F	10	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load		I_{FSM}	150	A
Maximum Instantaneous Forward Voltage @10A	$T_A=25^{\circ}\text{C}$	V_F	0.85	V
	$T_A=100^{\circ}\text{C}$		0.72	
Maximum Reverse Current at Rated VRRM Per Diode ²	$T_A=25^{\circ}\text{C}$	I_R	0.1	mA
	$T_A=100^{\circ}\text{C}$		5	
Typical Junction Capacitance ¹		C_J	580	pF
Voltage Rate Of Change		dv/dt	10000	V/us
Typical Thermal Resistance ³		$R_{\theta JC}$	10	$^{\circ}\text{C/W}$
Operating & Storage Temperature		T_J, T_{STG}	-55~150	$^{\circ}\text{C}$

NOTES:

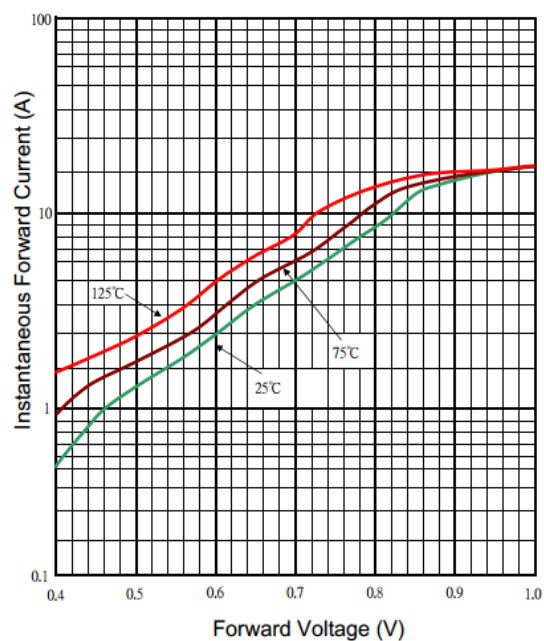
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C..
2. Plus test: 300uS Pulse width, 2% duty cycle.
3. Thermal Resistance Junction to Case. FR4 Board Heat sink size: 10*10*0.2mm.

RATINGS AND CHARACTERISTIC CURVES

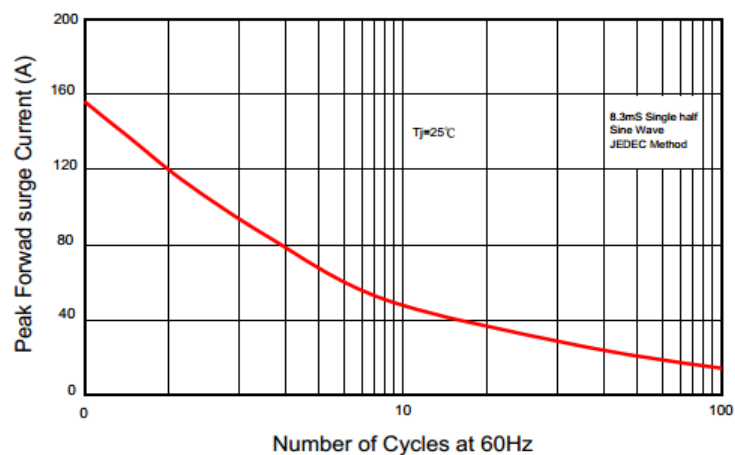
Typical Forward Current Derating Curve



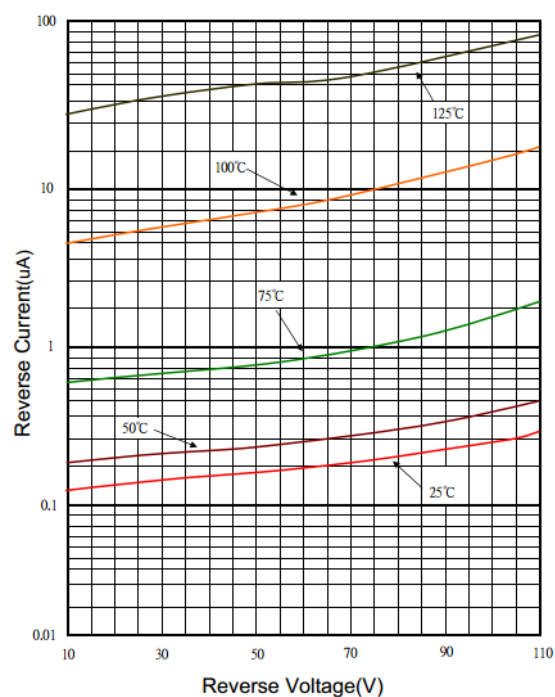
Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

