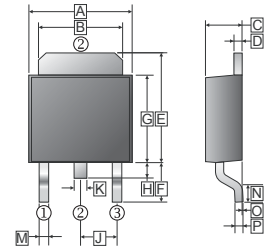
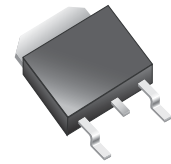


RoHS Compliant Product  
A suffix of "-C" specifies halogen free

**TO-252**

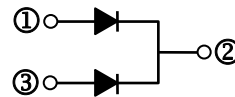


**FEATURES**

- Low forward voltage drop
- Low reverse current
- 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: 0.7g (Approximate)



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			

**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 Recurrent Peak Reverse Voltage	$V_{RRM}$	100	V
Working Peak Reverse Voltage	$V_{RSM}$	100	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current	$I_F$	10	A
(Per Leg)		20	
(Per Device)			
Peak Forward Surge Current, 8.3 ms single half sine-wave	$I_{FSM}$	160	A
Voltage Rate of Change (Rated $V_R$ )	$dv/dt$	10000	V / $\mu s$
Typical Thermal Resistance <sup>3</sup>	$R_{\theta JC}$	10	°C / W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55~150	°C

**ELECTRICAL CHARACTERISTICS**

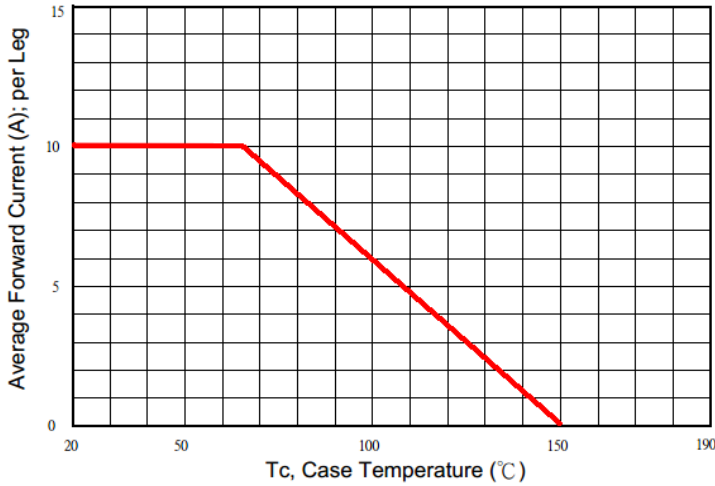
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	$V_F$	0.76	0.8	V	$I_F = 8A, T_J = 25^\circ C$
		0.63	0.65		$I_F = 8A, T_J = 125^\circ C$
		0.8	0.85		$I_F = 10A, T_J = 25^\circ C$
		0.66	0.68		$I_F = 10A, T_J = 125^\circ C$
Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>2</sup>	$I_R$	2	10	$\mu A$	$T_J = 25^\circ C$
		1	4		$T_J = 125^\circ C$
Typical Junction Capacitance <sup>1</sup>	$C_J$	180	-	pF	

NOTES:

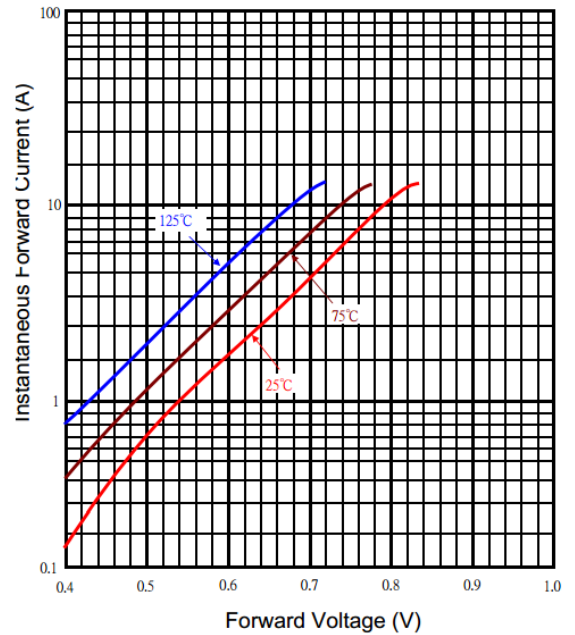
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Pulse test: Pulse width 40ms
3. FR4 Board Heat sink size: 10\*10\*0.2mm.

**RATINGS AND CHARACTERISTIC CURVES**

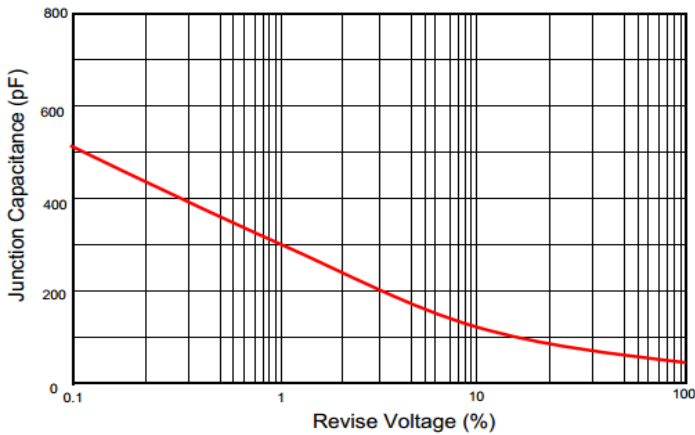
Typical Forward Current Derating Curve



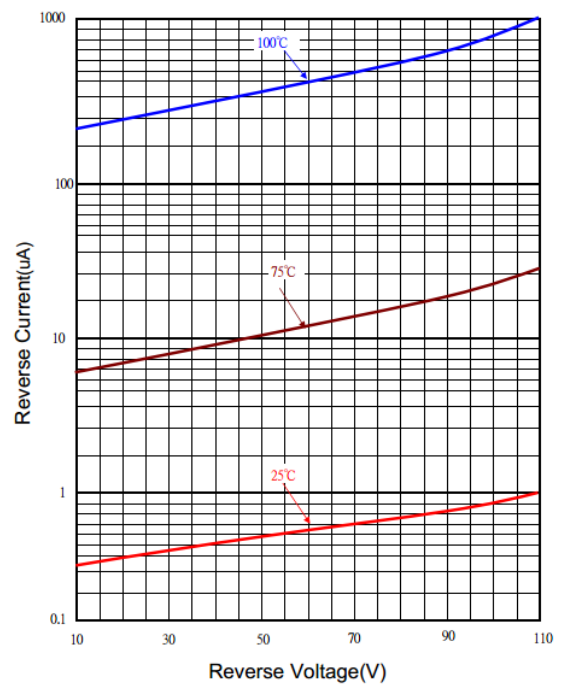
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

