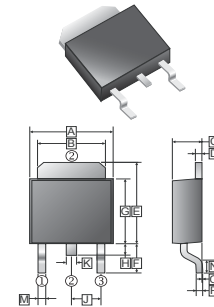


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

TO-252(D-PACK)

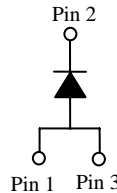
FEATURES

- 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



Package Configuration

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.8	J	2.30 REF.	
B	5.20	5.50	K	0.70	0.90
C	2.20	2.40	L	0.50	0.70
D	0.43	0.58	M	0.60	0.90
E	6.40	7.35	N	1.40	1.78
F	2.40	3.00	O	0	0.15
G	5.40	5.80	P	0.43	0.58
H	0.60	1.20			

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%.

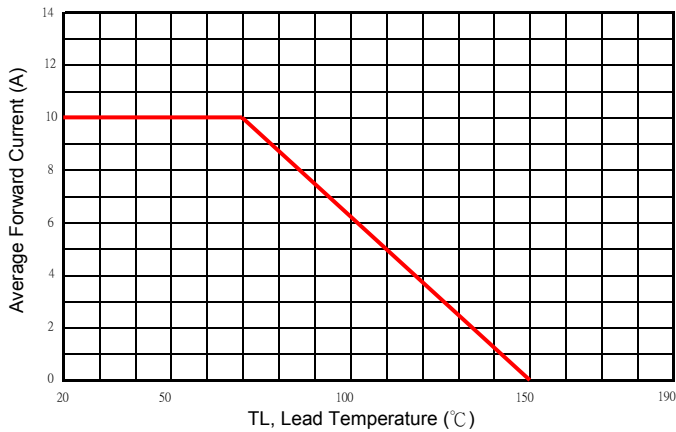
PARAMETER	SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Maximum RMS Voltage	V_{RMS}	42	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Maximum Average Forward Rectified Current	I_F	10	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	170	A
Maximum Instantaneous Forward Voltage @ 10A	V_F	0.72	V
Maximum DC Reverse Current at V_{RRM} Voltage Note 3	$T_A=25^{\circ}C$	0.2	mA
	$T_A=100^{\circ}C$	10	
Typical Junction Capacitance Note1	C_J	260	pF
Typical Thermal Resistance Note 2	$R_{\theta JL}$	10	°C/W
Operating & Storage Temperature	T_J, T_{STG}	-55~150	°C

NOTES:

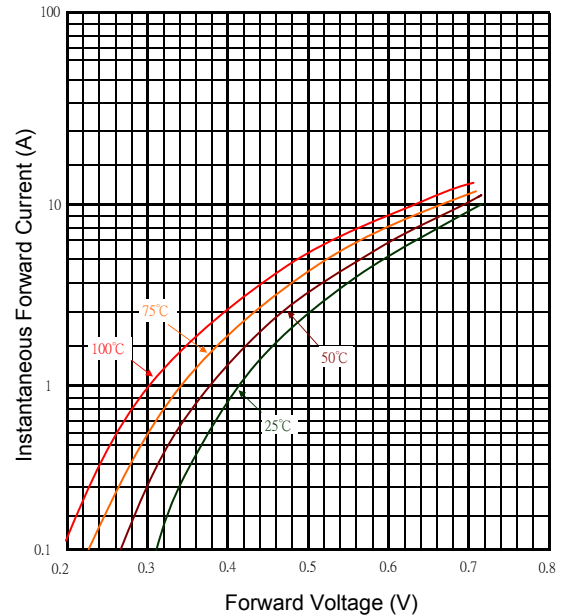
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.
3. Pulse test: 300us pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTIC CURVES

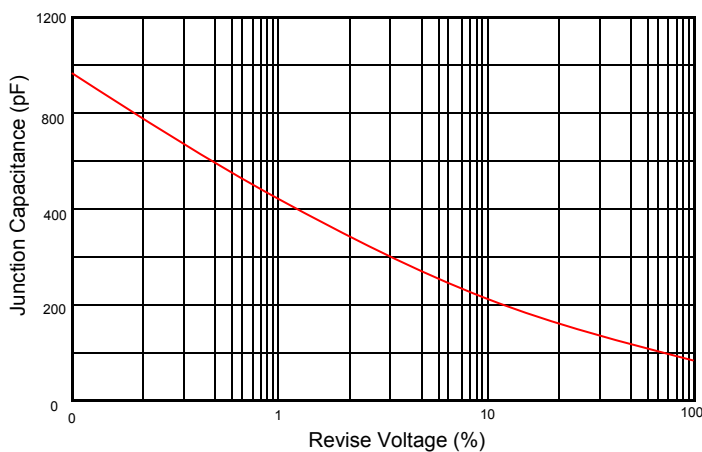
Typical Forward Current Derating Curve



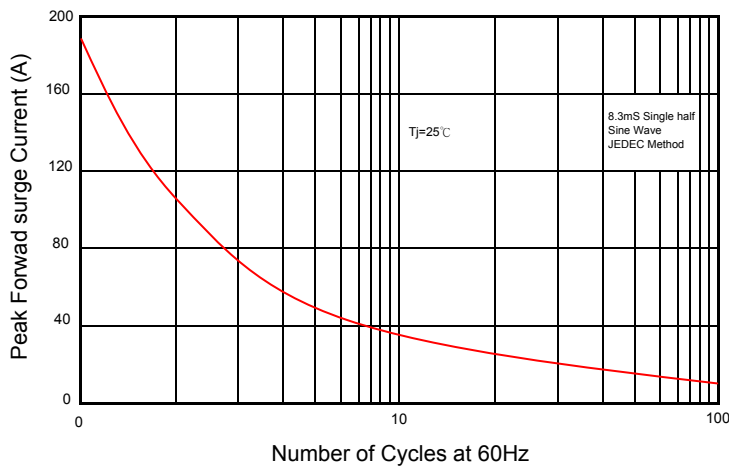
Typical Forward Characteristic



Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic

