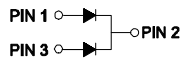
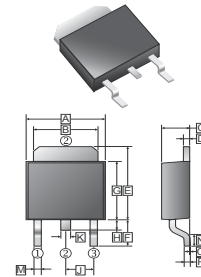


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

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

TO-252(D-PACK)



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: 0.7 grams

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.8	J	2.30	REF.
B	5.2	5.5	K	0.64	0.9
C	2.15	2.4	M	0.5	1.1
D	0.45	0.58	N	0.9	1.65
E	6.8	7.5	O	0	0.15
F	2.4	3.0	P	0.43	0.58
G	5.4	6.25			
H	0.64	1.2			

Absolute Rating

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	Value	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Maximum RMS Voltage	V_{RMS}	45	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current	Per Terminal	8	A
	Per Device	16	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	190	A
Typical Junction Capacitance Note. 1	C_J	320	pF
Typical Thermal Resistance	$R_{\theta JC}$	8	°C/W
Operating Temperature	T_J	-55~150	°C
Storage Temperature	T_{STG}	-55~150	°C

Static Electrical Characteristics

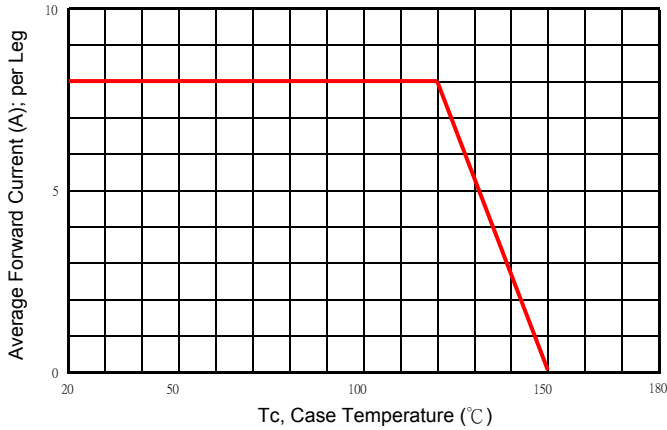
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage drop (per Terminal)	V_F	$I_F=5A$ $T_J=25^\circ C$		0.44	0.48	V
		$I_F=5A$ $T_J=100^\circ C$		0.39	0.41	
		$I_F=8A$ $T_J=25^\circ C$		0.49	0.52	
		$I_F=8A$ $T_J=100^\circ C$		0.46	0.48	
Reverse leakage current (note 3)	I_R	$V_R=45V$ $T_J=25^\circ C$		65	200	uA
		$V_R=45V$ $T_J=100^\circ C$		9	20	mA

NOTES:

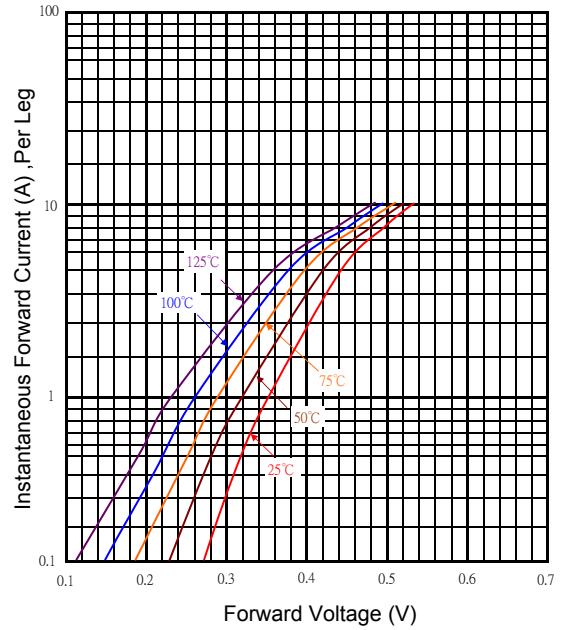
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.
3. Pulse test: Pulse width 0.4ms.

RATINGS AND CHARACTERISTIC CURVES

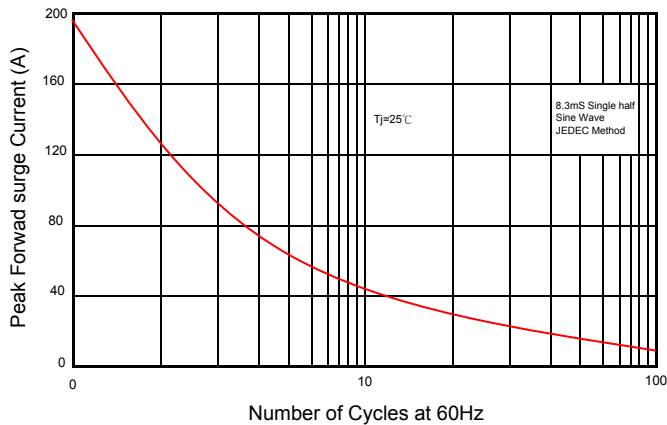
Typical Forward Current Derating Curve



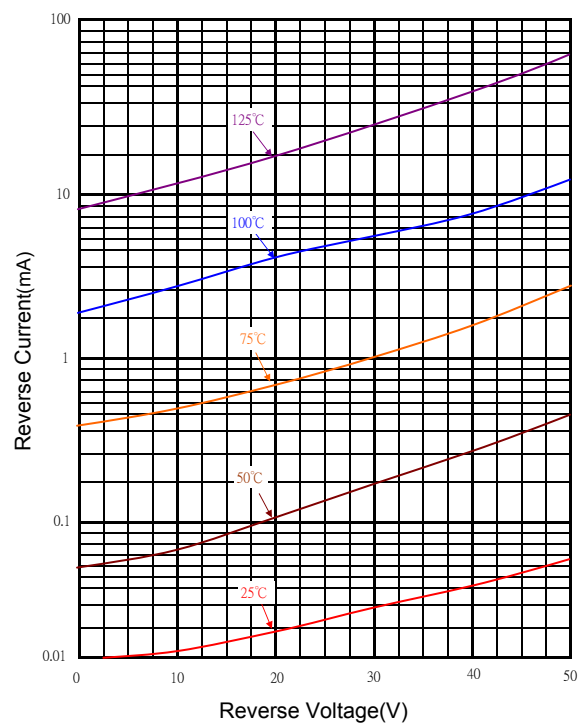
Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

