

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

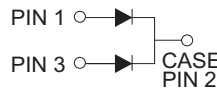
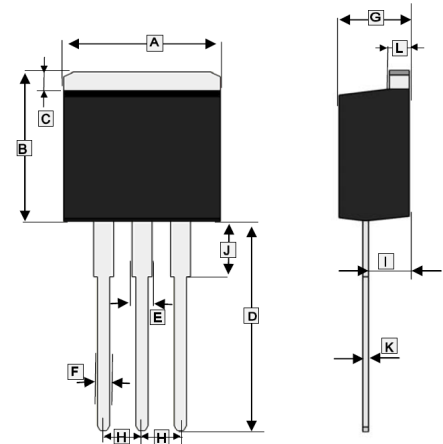
## FEATURES

- 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
- Weight: 1.62 grams (approximate)

### TO-262 (I<sup>2</sup>-PACK)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	10.0	10.31	G	4.47	4.7
B	10.0	10.5	H	2.54 BSC	
C	1.27	1.4	I	2.5	2.9
D	13.7	14.1	J	4.0	4.2
E	1.2	1.4	K	0.25	0.35
F	0.68	0.91	L	1.15	1.37

## 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	Per Leg	$I_F$	10	A
	Per Device		20	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		$I_{FSM}$	320	A
Typical Instantaneous Forward Voltage	$I_F=10A, T_A=25^\circ C$ , per leg	$V_F$	0.73	V
	$I_F=10A, T_A=125^\circ C$ , per leg		0.59	
Maximum Instantaneous Forward Voltage	$I_F=10A, T_A=25^\circ C$ , per leg		0.76	
	$I_F=10A, T_A=125^\circ C$ , per leg		0.62	
Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>4</sup>	$T_A=25^\circ C$	$I_R$	5	$\mu A$
	$T_A=125^\circ C$		5	mA
Typical Junction Capacitance <sup>1</sup>		$C_J$	425	pF
Typical Thermal Resistance <sup>2</sup>		$R_{\theta JC}$	6	$^\circ C / W$
Typical Thermal Resistance <sup>3</sup>		$R_{\theta JA}$	25	$^\circ C / W$
Operating Temperature Range $T_J$		$T_J$	175	$^\circ C$
Storage Temperature Range $T_{STG}$		$T_{STG}$	-65~175	$^\circ C$

Notes:

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

**RATINGS AND CHARACTERISTIC CURVES**

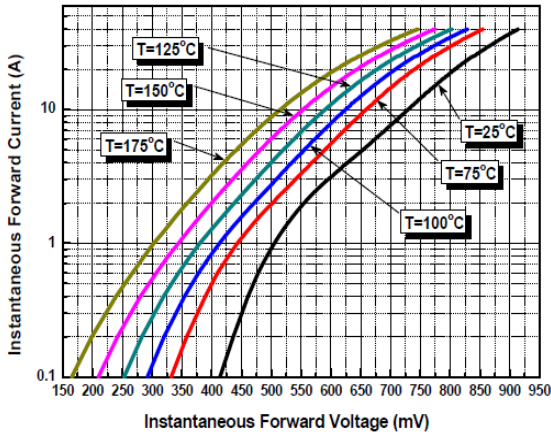


Figure 1. Typical Forward Characteristics per Diode

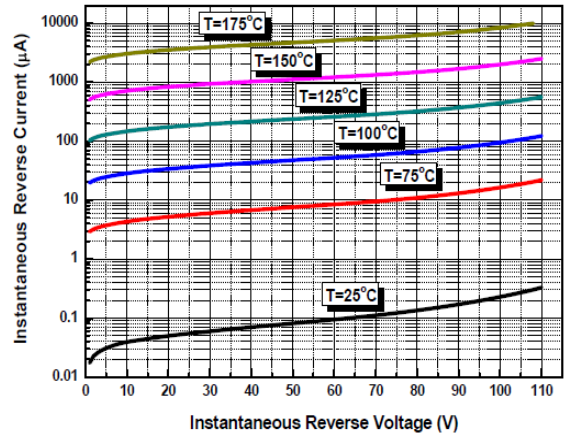


Figure 2. Typical Reverse Characteristics per Diode

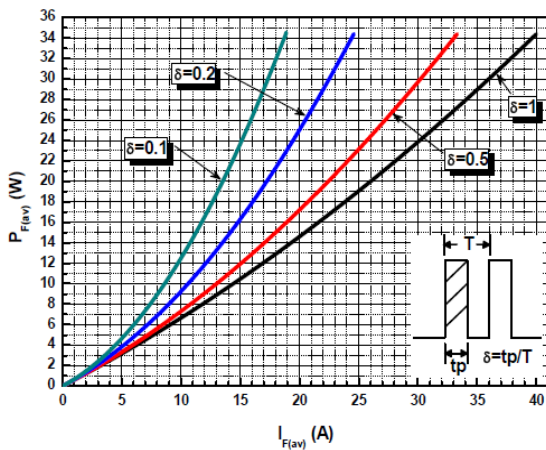


Figure 3. Average Forward Power Dissipation per Diode

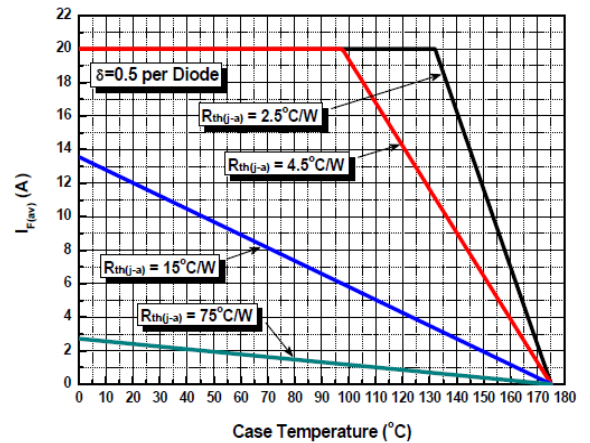


Figure 4. Current Derating Curves

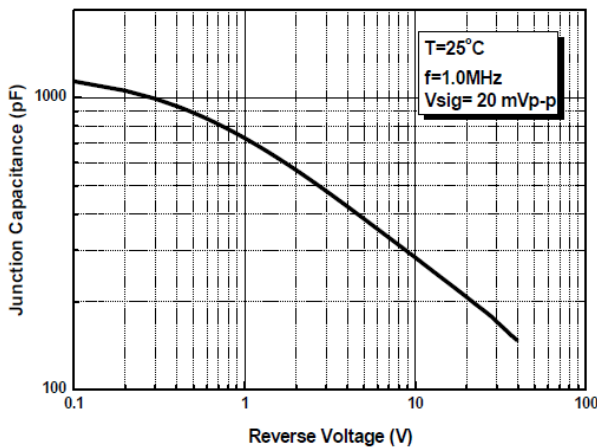


Figure 5. Typical Junction Capacitance per Diode