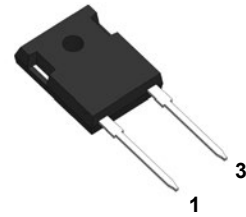



Features

- Plastic package has underwriters laboratory flammability classification 94V-0
- Glass passivated chip
- Low VF, low power loss
- Flexible solution for reliable AC power rectification
- High surge capability
- Meets JESD 201 class 2 whisker test
- High temperature soldering guaranteed: 260°C/10s at terminals
- Component in accordance to RoHS 2015/863/EU



TO-247AC

Pin1  Pin3
 Case

Schematic Diagram

Mechanical Data

- Case: TO-247AC molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: As marked.
- Mounting position: Any

Maximum Ratings & Electrical Characteristics

(T_A=25°C unless otherwise noted)

Parameters		Symbols	Value				Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	1600				V
Maximum RMS Voltage		V _{RMS}	1130				V
Maximum DC Blocking Voltage		V _{DC}	1600				V
Maximum Average Forward Rectified Current (D=0.5 Rectangular Wave)		I _{F(AV)}	45				A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load, (JEDEC Method Total Device)		I _{FSM}	550				A
Forward Voltage at 45A ¹		V _F	Typ.	1.20	Max.	1.30	V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage ¹	T _J =25°C	I _R	Max.		5		uA
	T _J =125°C		Max.		250		uA
Typical Thermal Resistance ²		R _{θJC}	0.35				°C/W
Operating Junction Temperature Range		T _J	-55 to +150				°C
Storage Temperature Range		T _{STG}	-55 to +150				°C

Notes:

1. Pulse test: 300us pulse width, 1% duty cycle
2. Thermal resistance from junction to case, total device

Ratings and Characteristics Curves

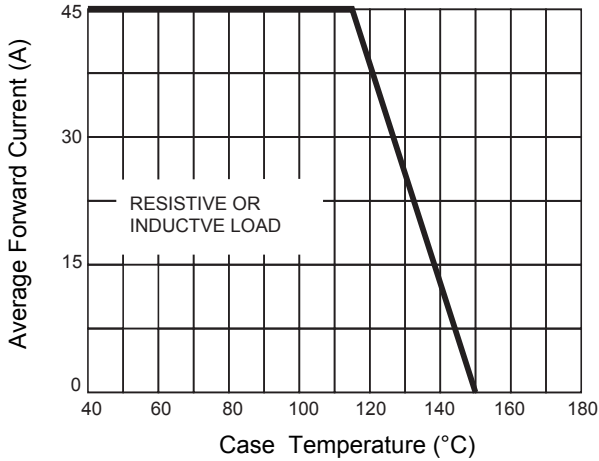


Figure 1. Forward Current Derating Curve

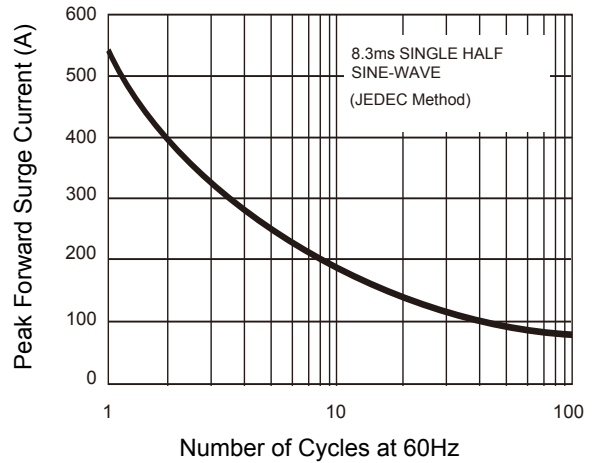


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

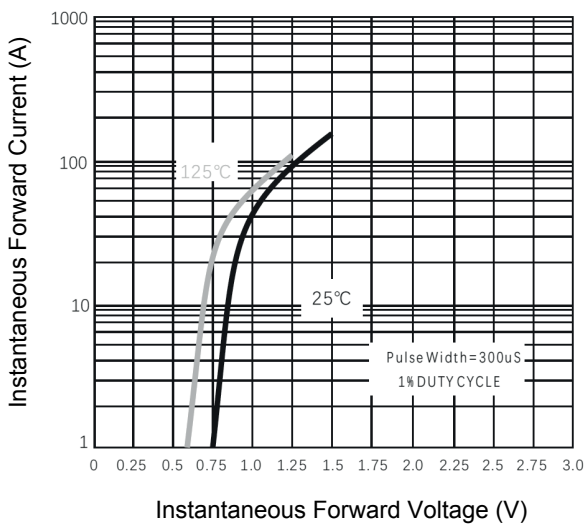


Figure 3. Typical Instantaneous Forward Characteristics

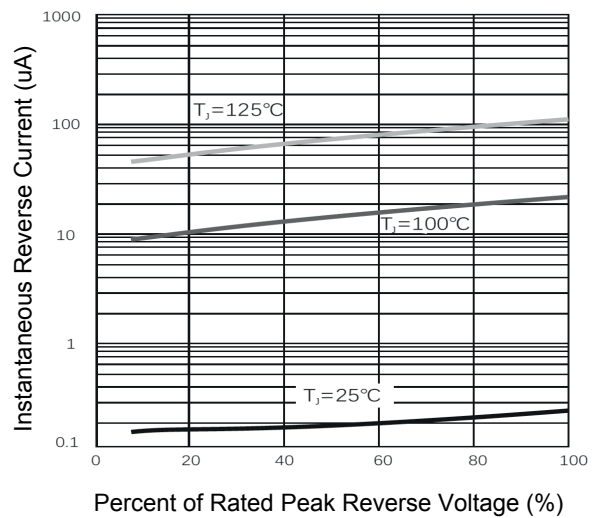
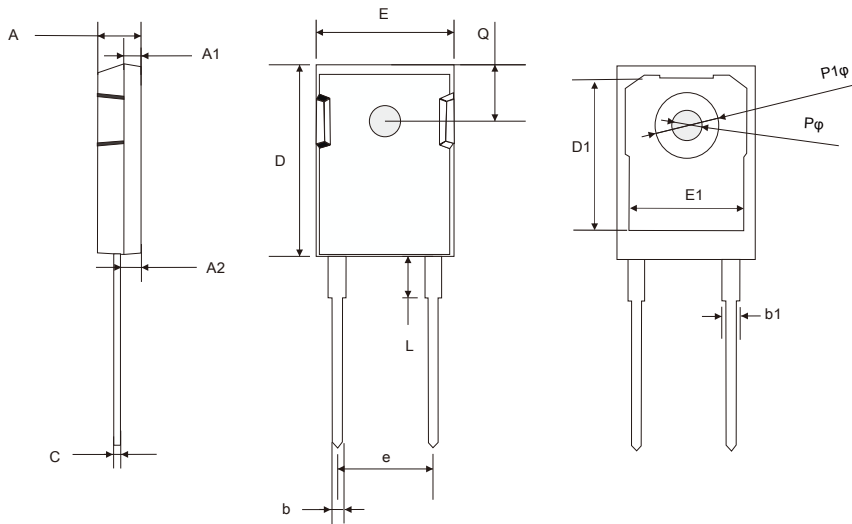


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions (TO-247AC)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.80	5.20	0.189	0.205
A1	1.88	2.10	0.074	0.083
A2	2.24	2.58	0.088	0.102
b	1.10	1.40	0.043	0.055
b1	1.90	2.20	0.075	0.087
C	0.51	0.76	0.020	0.030
D	20.50	21.30	0.807	0.839
D1	16.25	16.85	0.640	0.663
L	3.90	4.40	0.154	0.173
e	10.40	11.40	0.409	0.449
Q	5.40	6.20	0.213	0.244
E	15.40	16.40	0.606	0.646
E1	13.10	13.50	0.516	0.531
P	3.30	3.70	0.130	0.146
P1	-	7.30	-	0.287