Pb Free Plating Product

GPA1601 thru GPA1607

16.0 Amperes Heatsink Single Glass Passivated Process Avalanche Rectifier Diode

Features

- ✶ Avalanche energy rated(100% guarantee)
- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ Low reverse leakage current
- ✶ High surge current capability

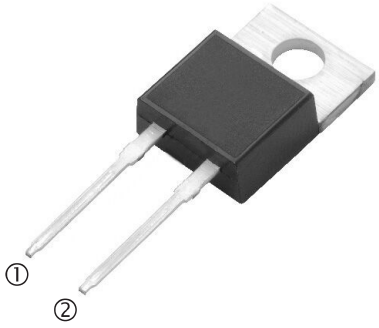
Application

- ✶ PhotoVoltaic BY-PASS DIODE
- ✶ PhotoVoltaic High-amperage Combiner Boxes
- ✶ Alternator(Automotive Wireharness/Capacitor Bank)

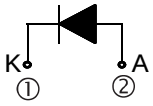
Mechanical Data

- ✶ Case: TO-220AC open metal heatsink package
- ✶ Epoxy: UL 94V-0 rate flame retardant
- ✶ Terminals: Solderable per MIL-STD-202 method 208
- ✶ Polarity: As marked on diode body
- ✶ Mounting position: Any
- ✶ Weight: 2.2 gram approximately

TO-220AC/TO-220-2L



Internal Configuration



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Type Number	Symbol	GPA 1601	GPA 1602	GPA 1603	GPA 1604	GPA 1605	GPA 1606	GPA 1607	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified @Tc = 120℃	I(AV)	16.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	250							A
Maximum Instantaneous Forward Voltage @ 16.0A	VF	1.1							V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ TA=125℃	IR	5.0 50							uA
Typical Junction Capacitance (Note 1)	Cj	100							pF
Typical Thermal Resistance (Note 2)	RθJC	1.5							℃/W
Operating Temperature Range	TJ	-65 to +150							℃
Storage Temperature Range	TSTG	-65 to +150							℃

Note 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
2. Mount on P.C. Board with 2"x3" x0.25" Al-plate

© 1995 Thinki Semiconductor Co., Ltd.

Download from alldatasheet.com

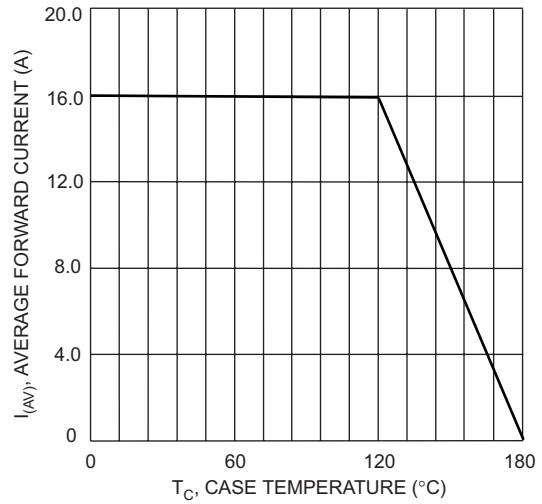


Fig. 1 Forward Current Derating Curve

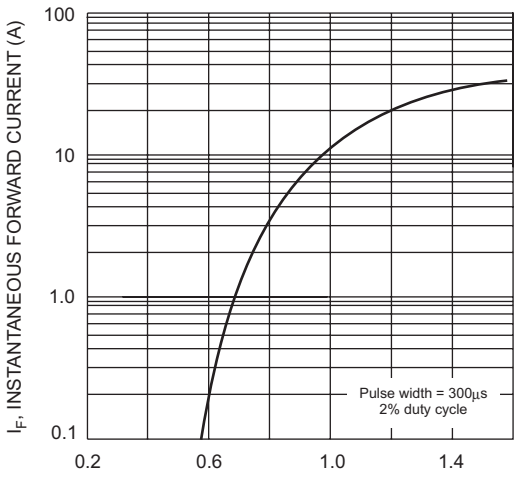


Fig. 2 Typical Forward Characteristics

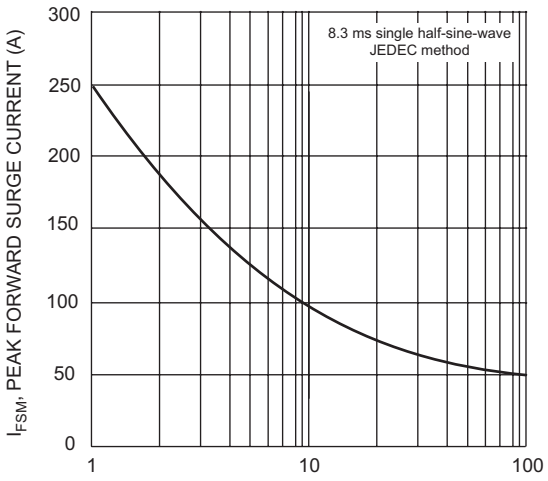


Fig. 3 Max Non-Repetitive Surge Current

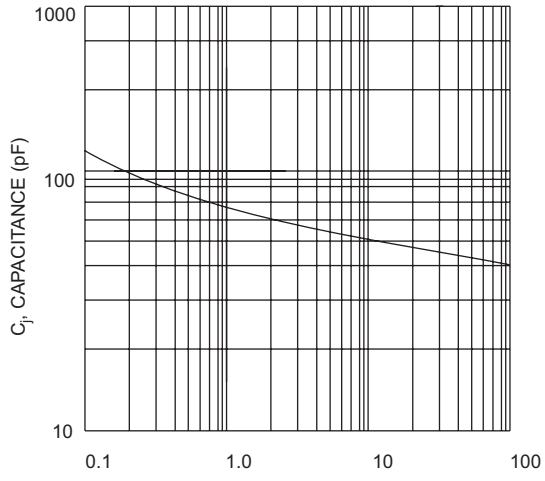
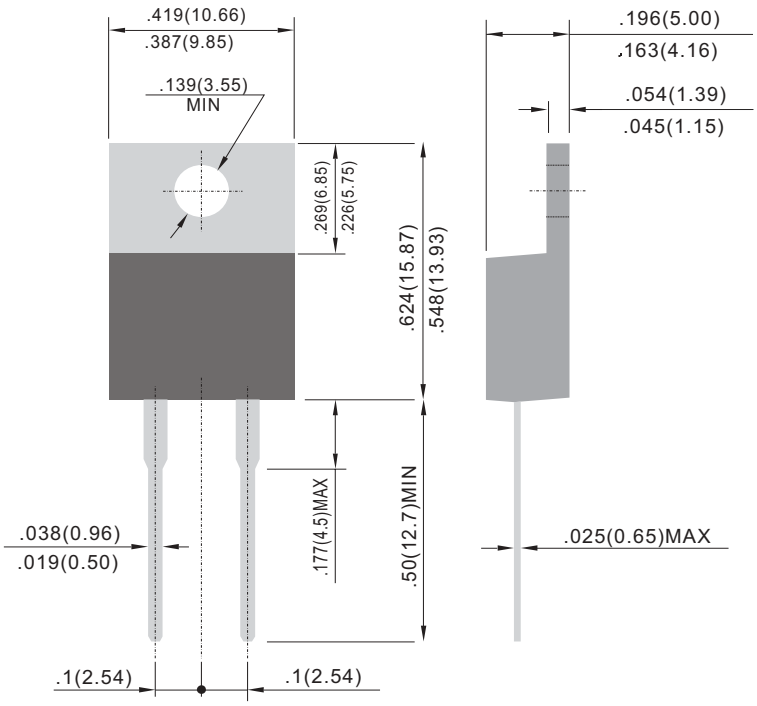


Fig. 4 Typical Junction Capacitance

© 1995 Thinki Semiconductor Co., Ltd.

Download from alldatasheet.com

TO-220AC/TO-220-2L Package Outline:



Unit : inch (mm)

© 1995 Thinki Semiconductor Co., Ltd.

Download from alldatasheet.com