

Features

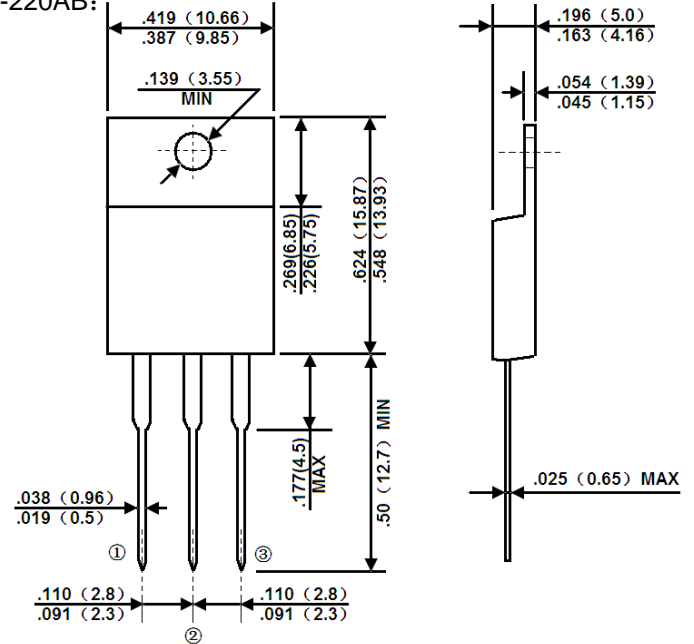
- * Glass passivated chip junction
- * High efficiency, low VF
- * High current capability
- * High Reliability
- * High Surge Current Capability
- * Low power loss



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

TO-220AB:



Mechanical Data

- * Cases: TO-220AB Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity: As marked
- * High temperature soldering: 270°C/10 seconds/ 0.16", (4.06mm) from case

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	GP 1601	GP 1602	GP 1603	GP 1604	GP 1605	GP 1606	GP 1607	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	16							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150							A
Maximum Instantaneous Forward Voltage (Note 1) @ 8 A	V_F	1.1							V
Maximum D.C Reverse Current @ $T_A=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	10 250							μA
Typical Junction Capacitance (Note 2)	C_j	50							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.5							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J/T_{STG}	-65 to +150							$^\circ\text{C}$

Note:1、 Pulse Test with PW=300 usec, 1% Duty Cycle 2、 Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Ratings and Characteristic Curves

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

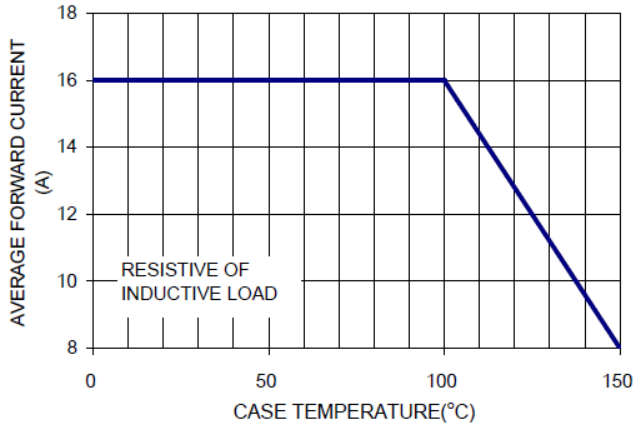


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

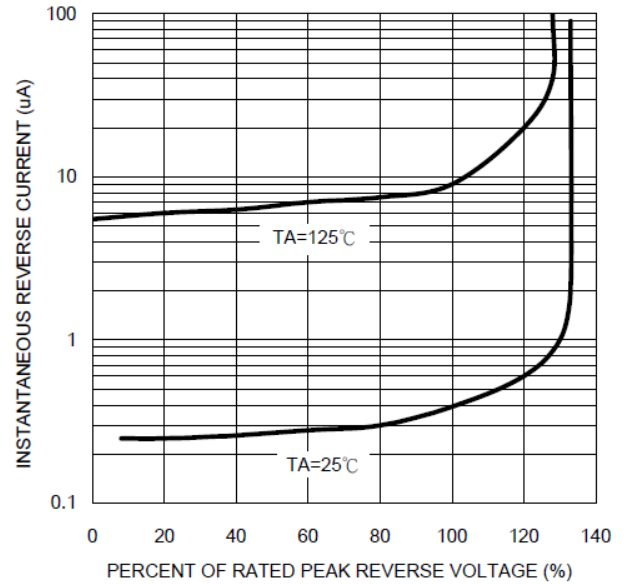


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

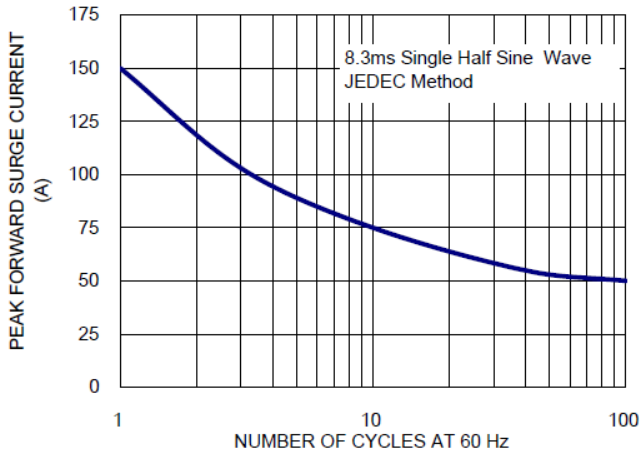


FIG. 5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

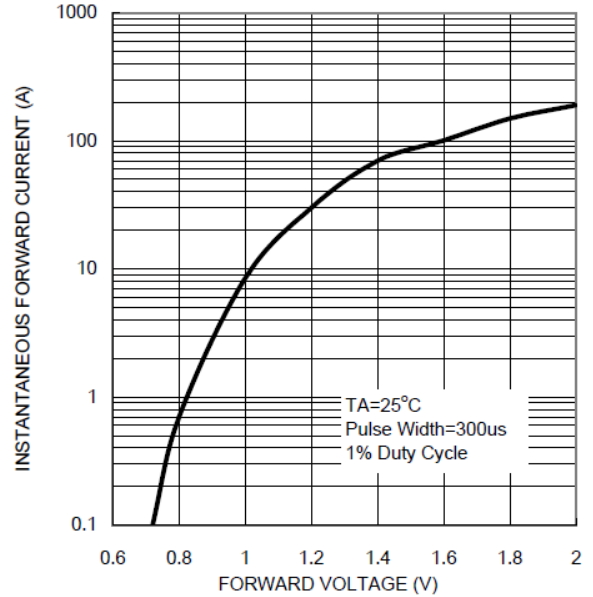
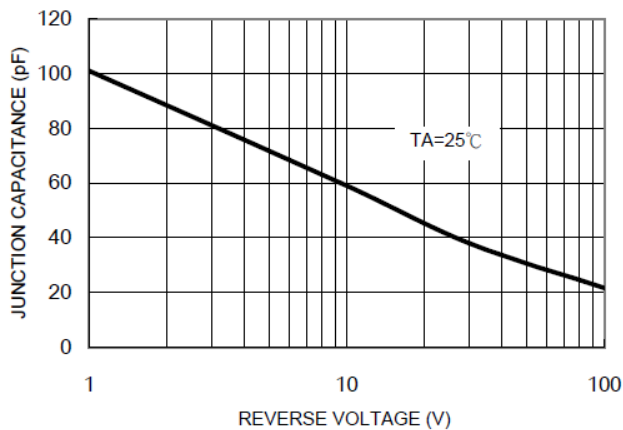


FIG. 4- TYPICAL JUNCTION CAPACITANCE





GP1601 THRU GP1607
Glass Passivated Rectifiers

Ordering Information

Part No.	Package	Packing
GP1601~GP1607	TO-220AB	50pcs/Tube