FR601G THRU FR607G

GLASS PASSIVATED
FAST RECOVERY RECTIFIER

VOLTAGE: 50 TO 1000V **CURRENT: 6.0A**

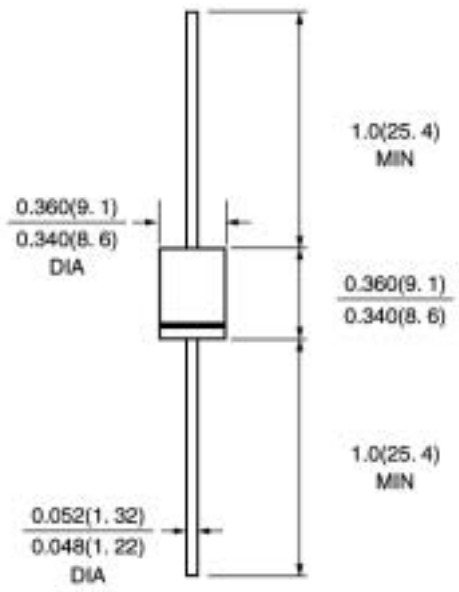
FEATURE

Molded case feature for auto insertion
High Switching Capability
Low leakage current
High surge capability
High temperature soldering guaranteed
250°C /10sec/0.375" lead length at 5 lbs tension
Glass Passivity chip

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

P600



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	FR 601G	FR 602G	FR 603G	FR 604G	FR 605G	FR 606G	FR 607G	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 Current 3/8" lead length at Ta =55°C	If(av)	6.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150							A
Maximum Instantaneous Forward Voltage at rated forward current	Vf	1.3							V
Maximum full load reverse current full cycle at T_L =75°C	Ir(av)	30							μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10.0 200.0							μA μA
Typical Junction Capacitance (Note 1)	Cj	50.0							pF
Maximum Reverse Recovery Time (Note 2)	Trr	150				250	500		nS
Storage and Operation Junction Temperature	Tstg, Tj	-65 to +150							°C

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
2. Test Condition If =0.5A, Ir =1.0A, Irr =0.25A

RATINGS AND CHARACTERISTIC CURVES FR601G THRU FR607G

[1]

FIG.1 – TYPICAL FORWARD CURRENT DERATING CURVE

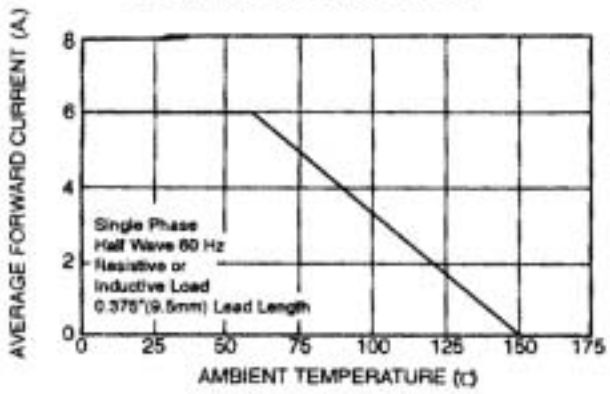


FIG.2 – MAXIMUM NON – REPETITVE FORWARD SURGE CURRENT

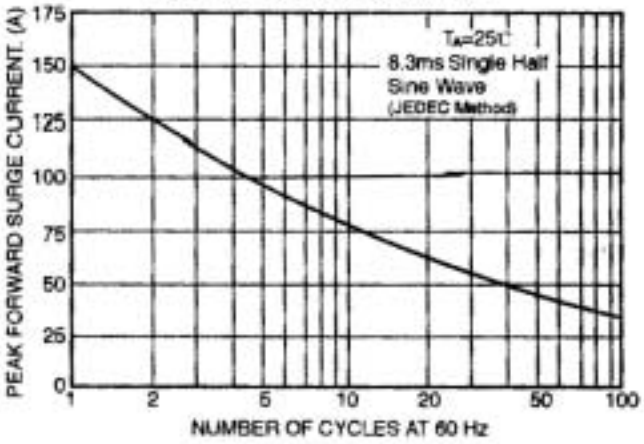


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

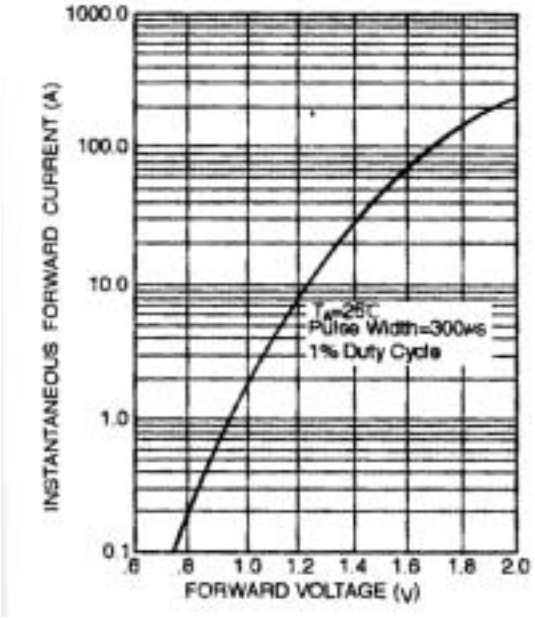
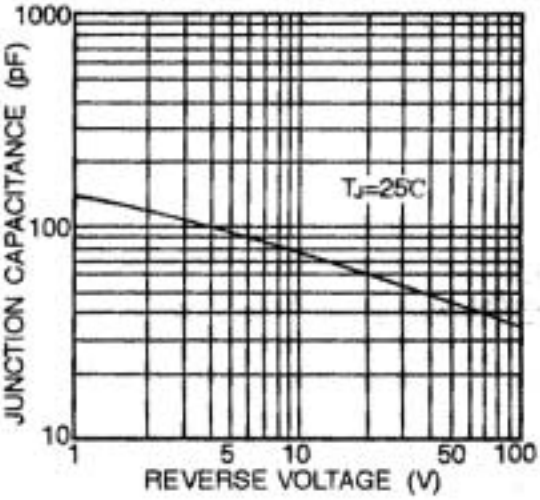


FIG.4 – TYPICAL JUNCTION CAPACITANCE



[1] Rev.A4, 1-Jul-03