FR601 THRU FR607

FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE:50 TO 1000V CURRENT:6.0A

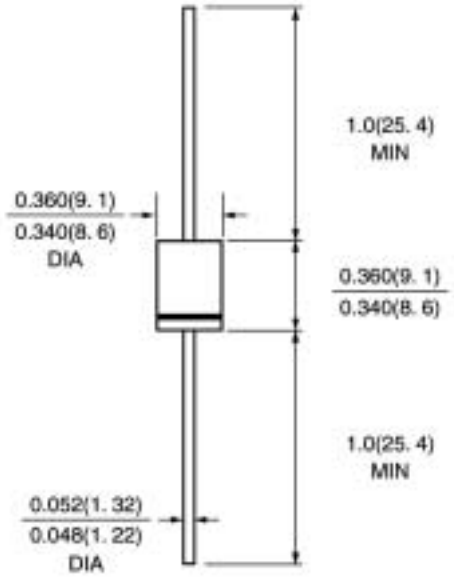
FEATURE

Molded case feature for auto insertion
High current capability
Low leakage current
High surge capability
High temperature soldering guaranteed
250°C/10sec/0.375”lead length at 5 lbs tension
Fast switching for high efficiency

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 601	FR 602	FR 603	FR 604	FR 605	FR 606	FR 607	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	200.0							A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.3							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	Ir	10.0 200							μA
Maximum Reverse Recovery Time (Note 1)	Trr	150				250	500		nS
Typical Junction Capacitance (Note 2)	Cj	100.0							pF
Storage and Operating Junction Temperature	Tstg,Tj	-50 to +125							°C

Note:

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

RATINGS AND CHARACTERISTIC CURVES FR601 THRU FR607

[1]

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

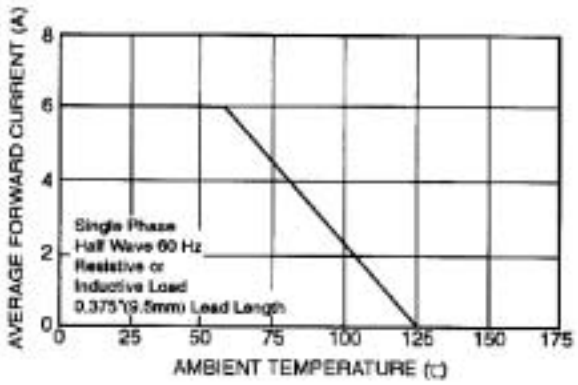


FIG. 2 – MAXIMUM NON – REPETITIVE FORWARD SURGE CURRENT

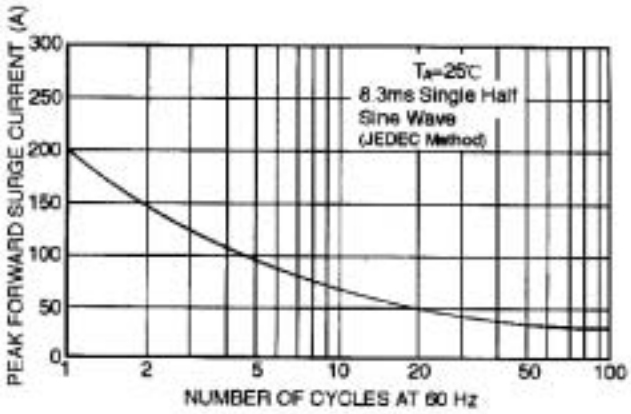


FIG. 3 – TYPICAL FORWARD CHARACTERISTICS

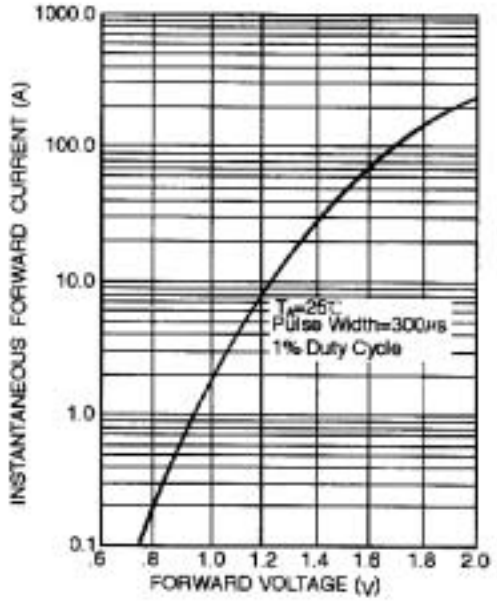
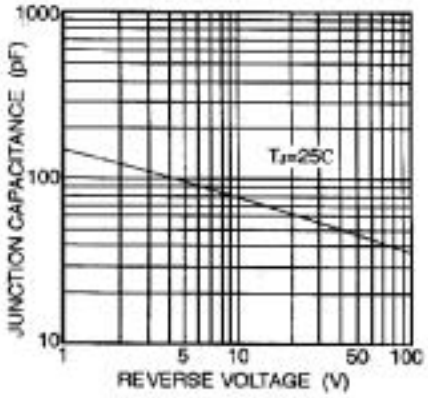


FIG. 4 – TYPICAL JUNCTION CAPACITANCE



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