

CURRENT 6.0 Ampere
 VOLTAGE RANG 50 to 1000 Volts

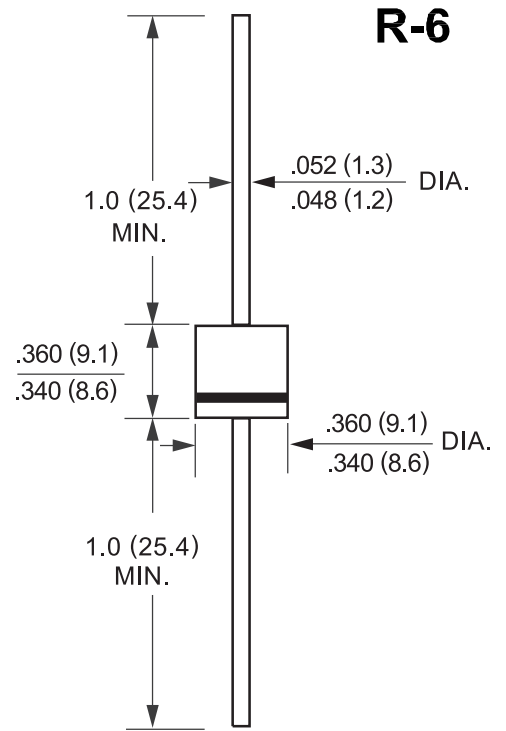
FR601 THRU FR607

FEATURES

- Low coat construction
- Fast switching for high efficiency.
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
 260 /10 secods/.375 (9.5mm)lead length at 5 lbs(2.3kg)
 tension

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E
 method 208C
- Mounting position: Any
- Weight: 0.042ounce, 2.19 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	FR 601	FR 602	FR 603	FR 604	FR 605	FR 606	FR 607	UNITS	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current 0.375 (9.5mm) lead length at $T_A=75$	$I_{(AV)}$	6.0							Amp	
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	300							Amps	
Maximum Instantaneous Forward Voltage @ 6.0A	V_F	1.3							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25$	10							μA
		$T_A=100$	500							
Maximum Reverse Recovery Time (Note 3) $T_J=25$	t_{rr}	150				250	500		ns	
Typical Junction Capacitance (Note 1)	C_J	150							pF	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	10							/W	
Operating Junction Temperature Range	T_J	(-55 to +150)								
Storage Temperature Range	T_{STG}	(-55 to +150)								

Notes:

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0Volts.
- 2 Thermal Resistance from junction to Ambient at .375 (9.5mm)lead length, P.C.board mounted.
- 3.Reverse Recovery Test Conditions: $I_f=0.5mA, I_r=1.0mA, I_{rr}=0.25A$

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RATING AND CHARACTERISTIC CURVES FR601 Thru FR607

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

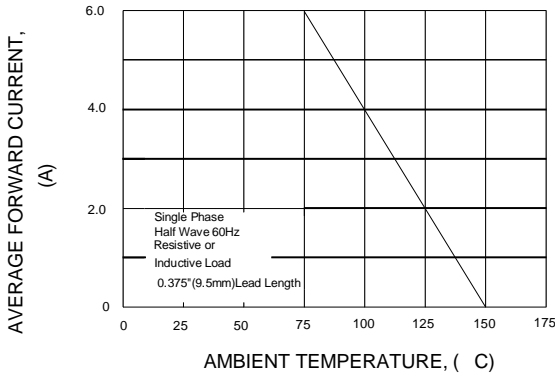


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

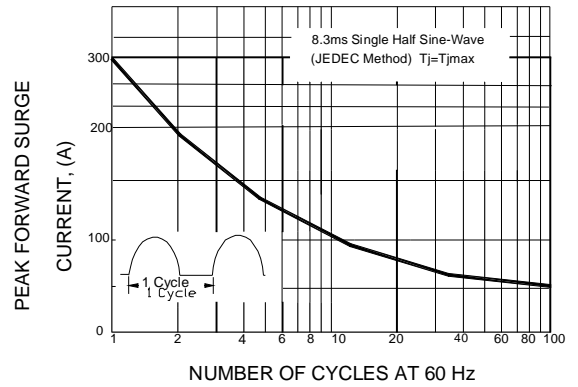


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

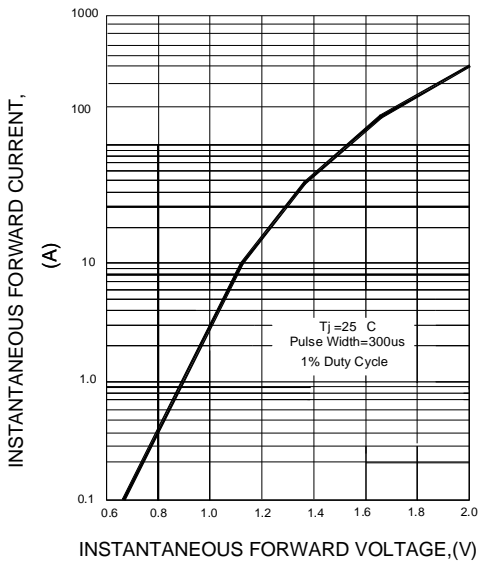


FIG.4-TYPICAL REVERSE CHARACTERISTICS

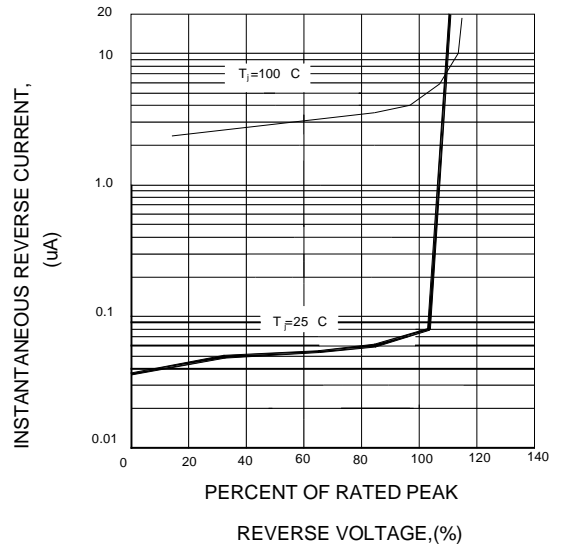


FIG.5-TYPICAL JUNCTION CAPACITANCE

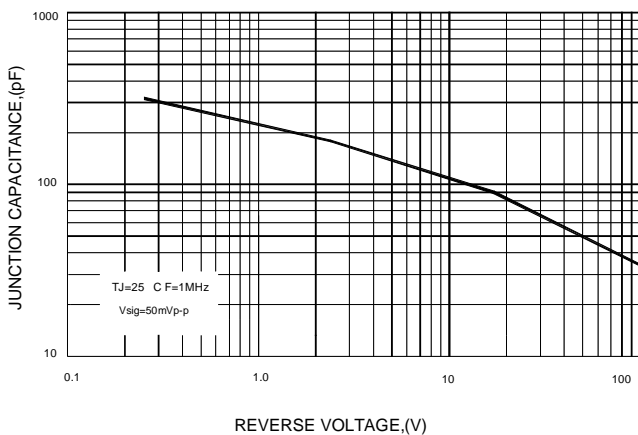


FIG.6-TYPICAL THERMAL RESISTANCE VS LEAD LENGTH

