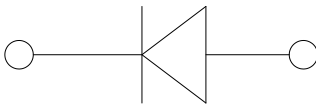
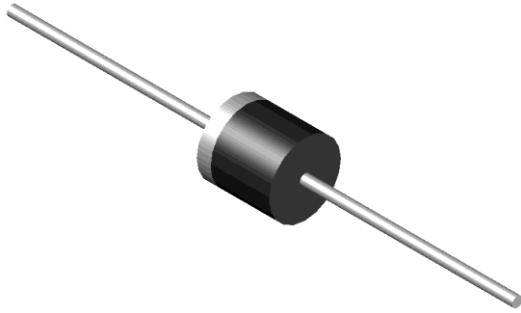


Fast Recovery Rectifier



Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Mechanical Data

- **Package:** R-6
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FR601G	FR602G	FR603G	FR604G	FR605G	FR606G	FR607G
Device marking code			FR601G	FR602G	FR603G	FR604G	FR605G	FR606G	FR607G
Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=65°C	$I_{F(AV)}$	A	6.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	I_{FSM}	A	200						
Storage Temperature	T_{stg}	°C	-55 ~+150						
Junction Temperature	T_j	°C	-55~+150						

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	FR601G	FR602G	FR603G	FR604G	FR605G	FR606G	FR607G
Maximum instantaneous forward voltage drop per diode	V_{FM}	V	$I_{FM}=6.0A$	1.3						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	μA	$T_a=25^\circ C$	2.5						
	I_{RRM2}		$T_a=100^\circ C$	100						
Reverse Recovery time	t_r	ns	$I_F=0.5A$ $I_R=1A$ $I_{RR}=0.25A$	150			250		500	
Typical junction capacitance	C_j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	50						

■ Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FR601G	FR602G	FR603G	FR604G	FR605G	FR606G	FR607G
Thermal Resistance(Typical)	$R_{\theta J-A}$	°C/W	15						



FR601G THRU FR607G

Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FR601G~FR607G	D1	Approximate 1.95	500	500	5000	Tape
FR601G~FR607G	C1	Approximate 1.95	100	100	5000	Bulk

Characteristics (Typical)

FIG.1: Io-Ta Curve

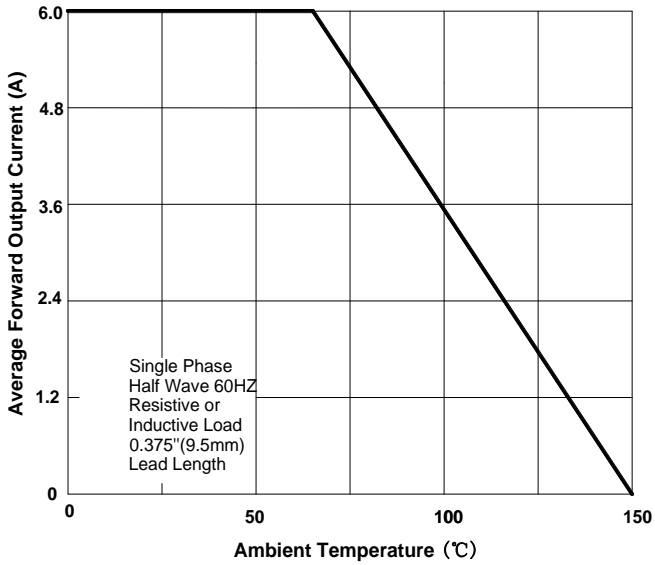


FIG.2: Forward Surge Current Capability

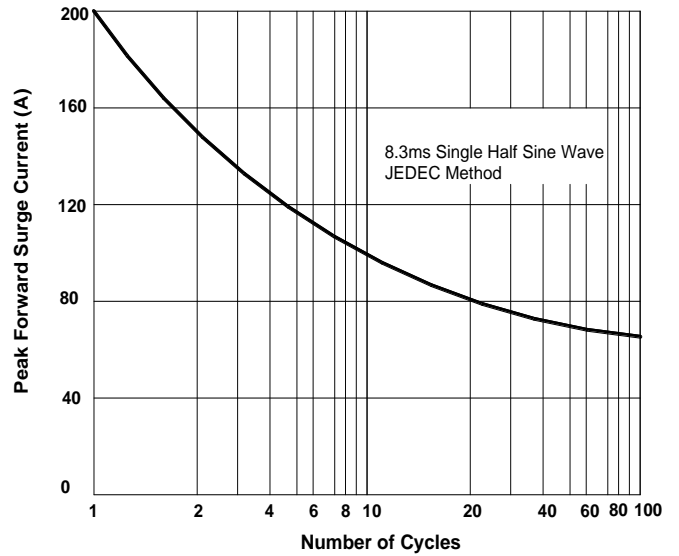


FIG.3: Forward Voltage

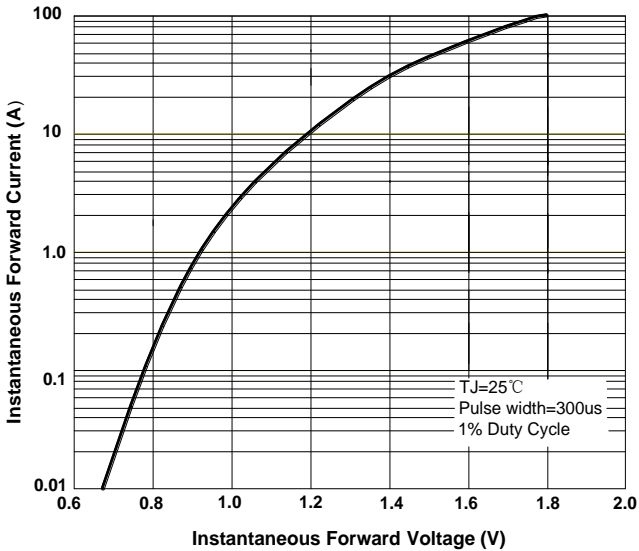
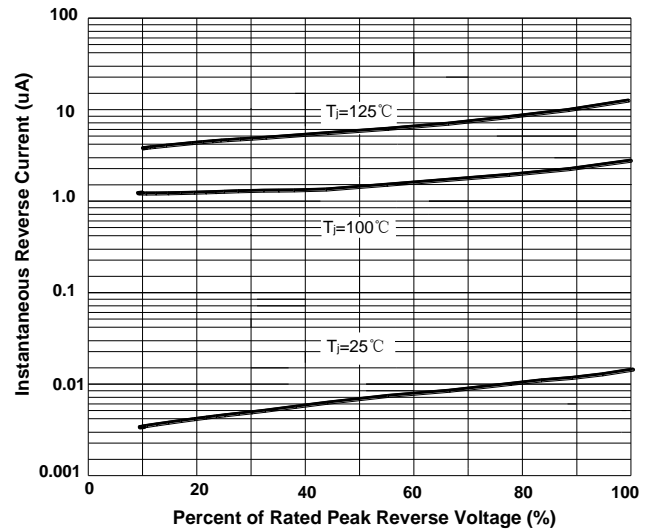


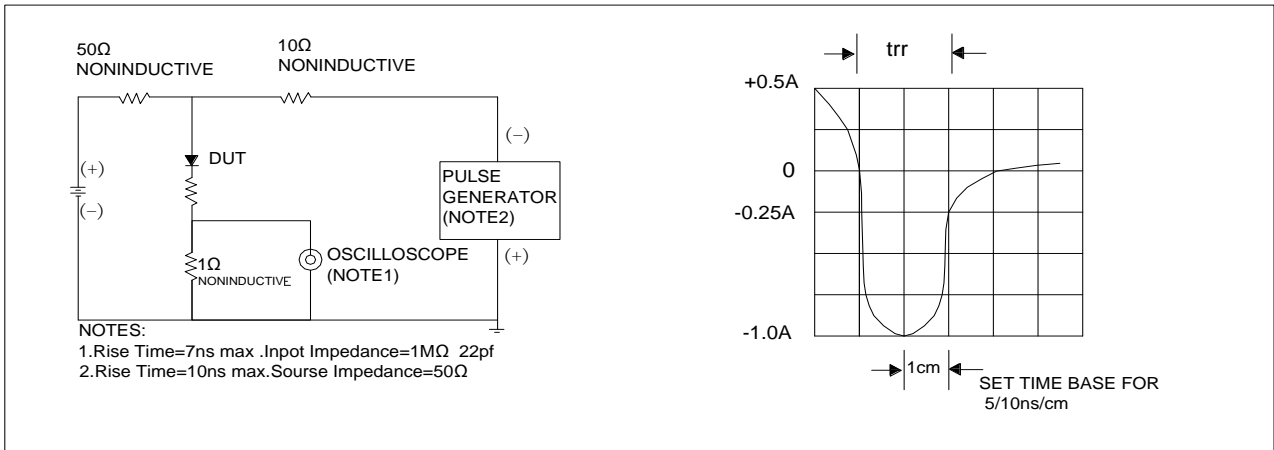
FIG.4: Typical Reverse Characteristics



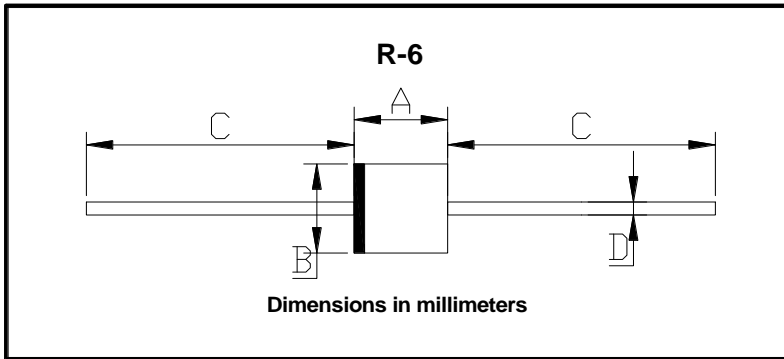


FR601G THRU FR607G

FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ Outline Dimensions



R-6		
Dim	Min	Max
A	8.60	9.10
B	8.60	9.10
C	25.4	/
D	1.20	1.32



FR601G THRU FR607G

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