

■ 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:** DO-204AC(DO-15)
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 (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FR201G	FR202G	FR203G	FR204G	FR205G	FR206G	FR207G
Device marking code			FR201G	FR202G	FR203G	FR204G	FR205G	FR206G	FR207G
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V _{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V _{DC}	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T _a =75°C	I _{F(AV)}	A	2.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	60						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			120						
Current squared time @1ms≤t ₁ ≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	15						
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C _j	pF	18				13	12	
Storage Temperature	T _{stg}	°C	-55 ~ +150						
Junction Temperature	T _j	°C	-55 ~ +150						

■ ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	FR201G	FR202G	FR203G	FR204G	FR205G	FR206G	FR207G
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	1.3						
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	2.5						
			T _j =125°C	100						
Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A, I _R =1.0A, I _R =0.25A	150			250	500		

■ **THERMAL CHARACTERISTICS** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FR201G	FR202G	FR203G	FR204G	FR205G	FR206G	FR207G
Typical Thermal Resistance	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	50						

■ **PACKAGING INFORMATION**

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FR201G~FR207G	D1	Approximate 0.38	3000	3000	30000	Tape
FR201G~FR207G	C1	Approximate 0.38	500	500	25000	Bulk

■ **CHARACTERISTICS (TYPICAL)**

FIG.1: I_o - T_a Curve

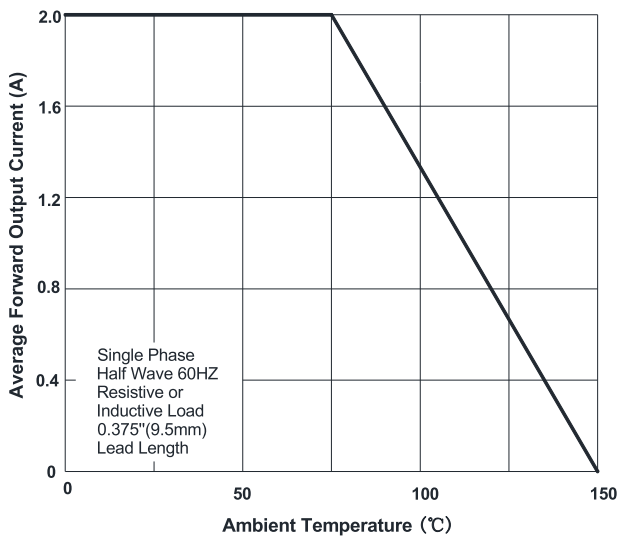


FIG.2: Forward Surge Current Capability

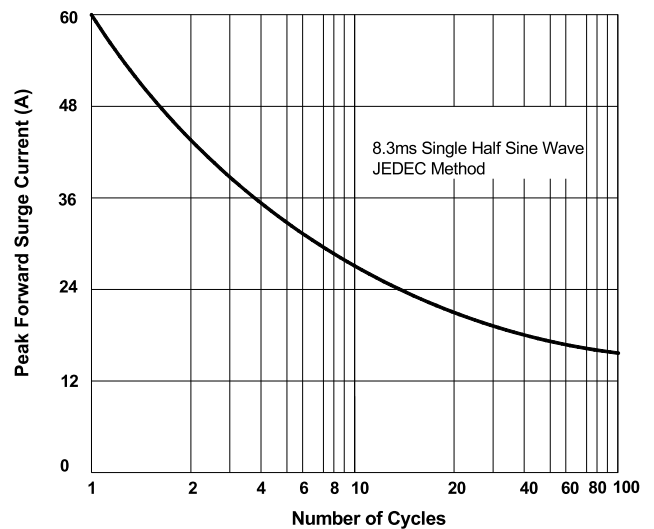


FIG.3: Forward Voltage

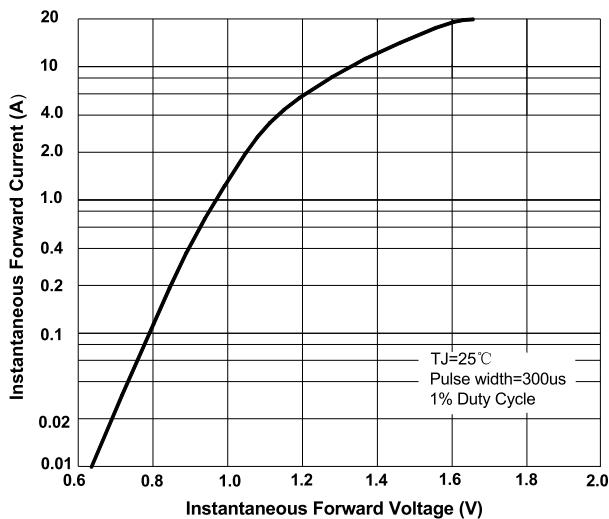


FIG.4: Typical Reverse Characteristics

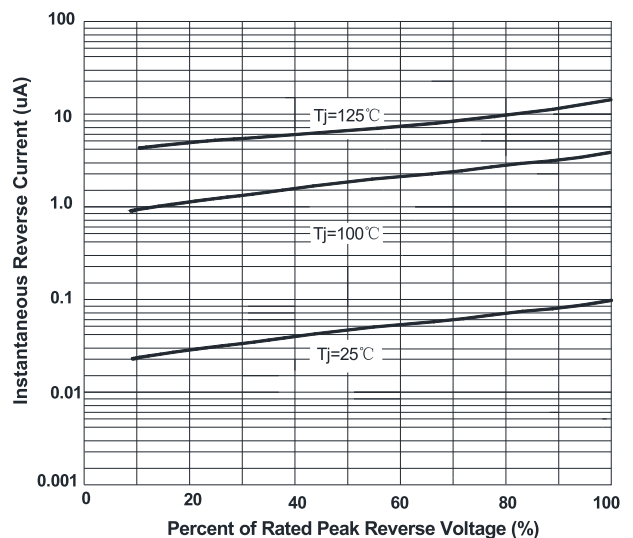
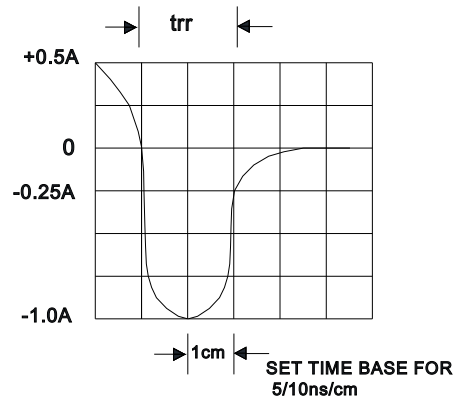
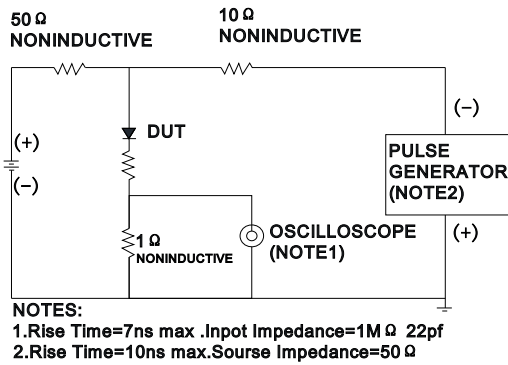
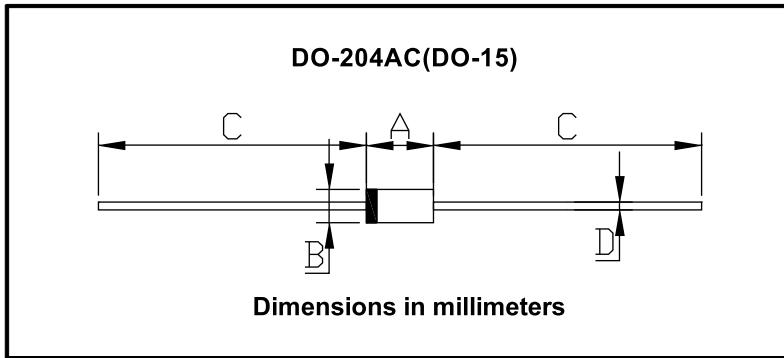


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ **OUTLINE DIMENSIONS**



DO-204AC(DO-15)		
Dim	Min	Max
A	5.80	7.60
B	2.60	3.60
C	25.4	/
D	0.70	0.90