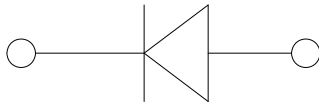
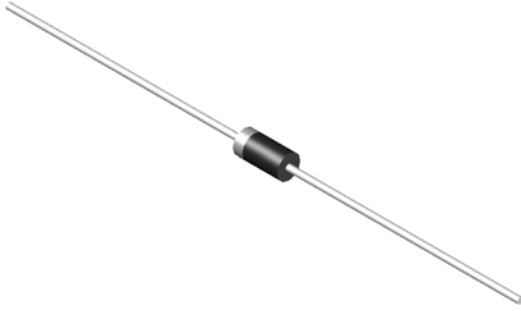


## Fast Recovery Rectifier



### 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:** DO-204AL(DO-41)  
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	FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G
Device marking code			FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G
Repetitive Peak Reverse Voltage	$V_{RRM}$	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=75°C	$I_{F(AV)}$	A	1.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	$I_{FSM}$	A	30						
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	FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G
Maximum instantaneous forward voltage drop per diode	$V_{FM}$	V	$I_{FM}=1.0A$	1.3						
Maximum DC reverse current at rated DC blocking voltage per diode	$I_{RRM1}$	μA	Ta=25°C	2.5						
	$I_{RRM2}$		Ta=100°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.	10						

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

PARAMETER	SYMBOL	UNIT	FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G
Thermal Resistance(Typical)	$R_{\theta JA}$	°C/W	60						



# FR101G THRU FR107G

## Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FR101G~FR107G	D1	Approximate 0.30	5000	5000	50000	Tape
FR101G~FR107G	C1	Approximate 0.30	1000	1000	50000	Bulk

## Characteristics (Typical)

FIG.1: Io-Ta Curve

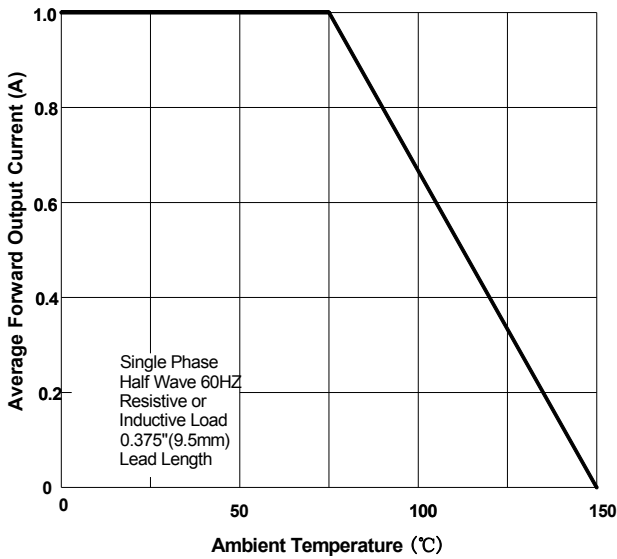


FIG.2: Forward Surge Current Capability

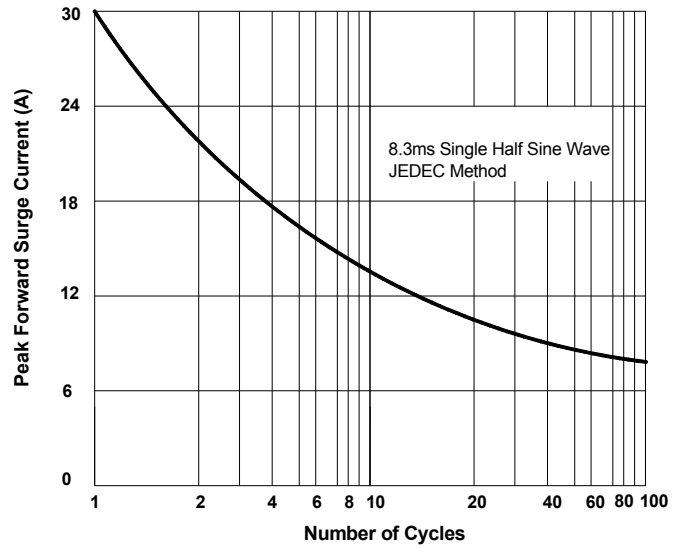


FIG.3: Forward Voltage

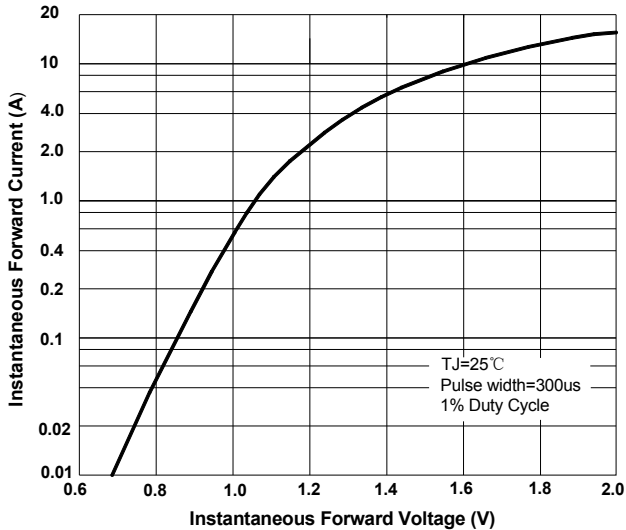
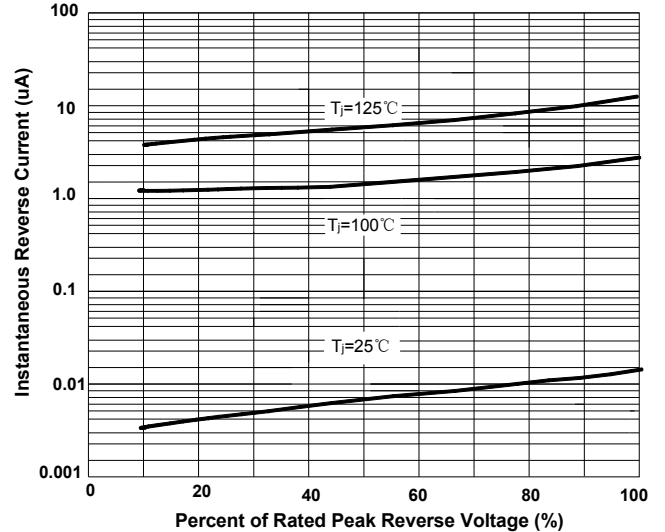


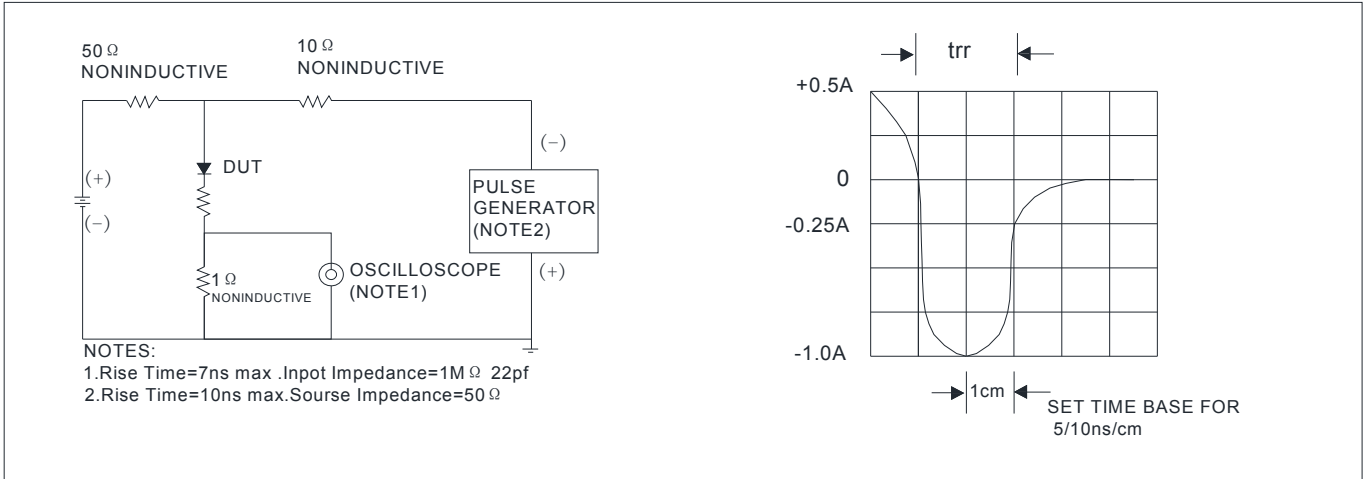
FIG.4: Typical Reverse Characteristics



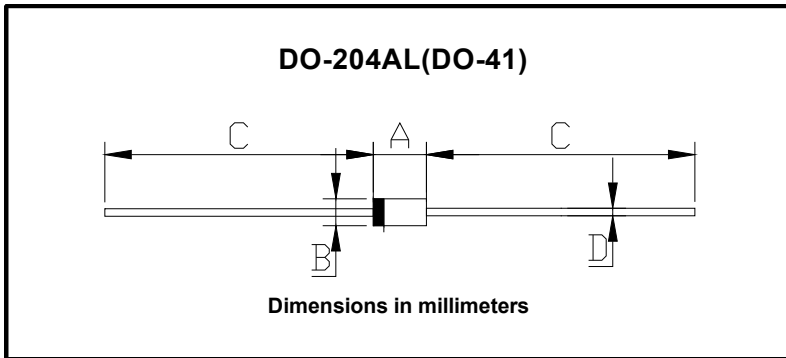


# FR101G THRU FR107G

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



## ■ Outline Dimensions



DO-204AL(DO-41)		
Dim	Min	Max
A	4.22	5.21
B	2.03	2.72
C	25.4	/
D	0.69	0.86



## FR101G THRU FR107G

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