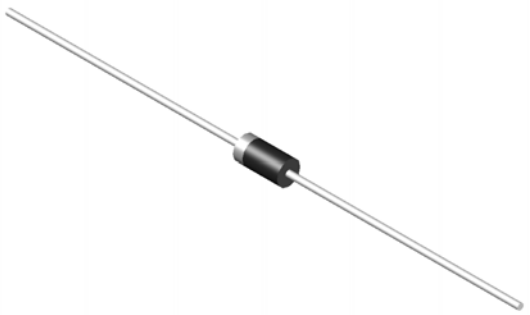
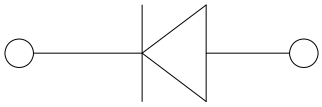
Fast Recovery Rectifier





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℃ 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℃	$I_{F(AV)}$	A	1.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Ta=25℃	I_{FSM}	A	30						
Storage Temperature	Tstg	℃	-55 ~+150						
Junction Temperature	Tj	℃	-55~+150						

■Electrical Characteristics (Ta=25℃ 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℃	2.5						
	I_{RRM2}		Ta=100℃	100						
Reverse Recovery time	t_{rr}	ns	I_F=0.5A I_R=1A I_{RR}=0.25A	150				250	500	
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C.	10						

■Thermal Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	60						

■Ordering Information (Example)

PREFERED 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

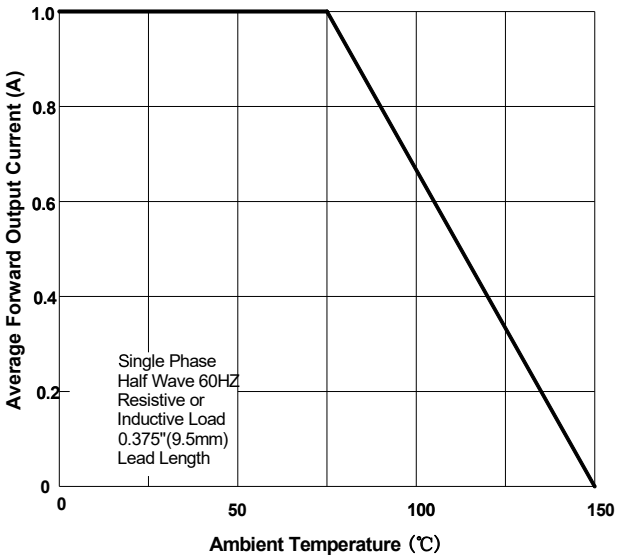


FIG.2: Forward Surge Current Capability

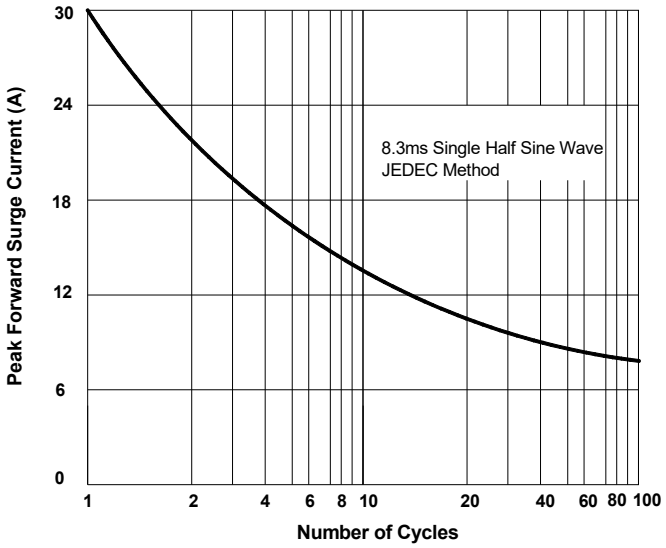


FIG.3: Forward Voltage

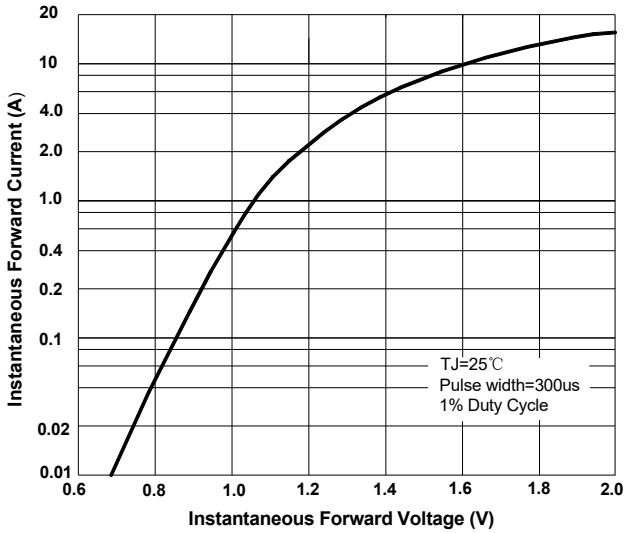


FIG.4: Typical Reverse Characteristics

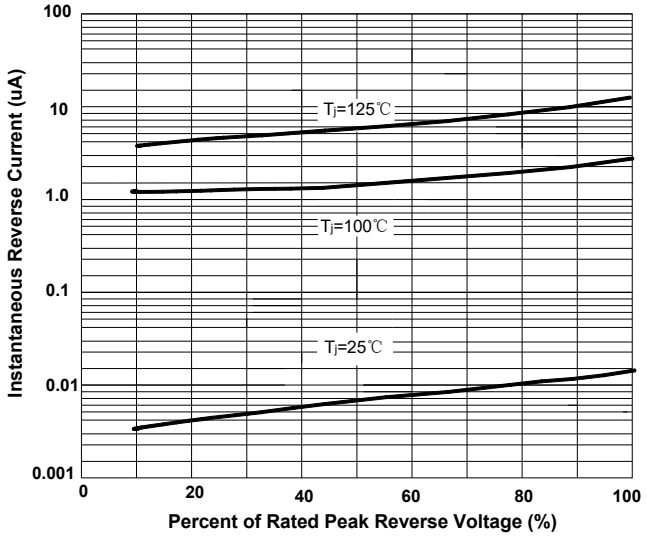
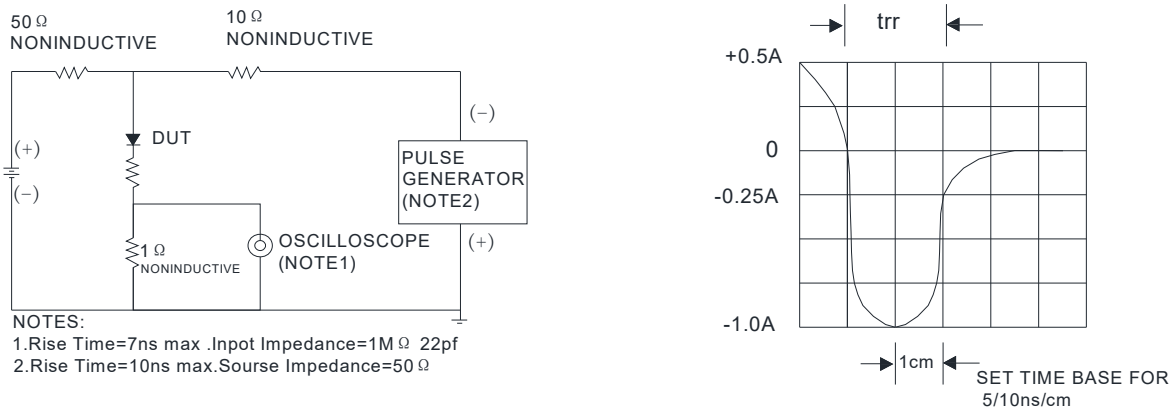
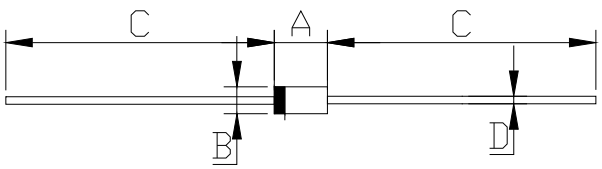


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ Outline Dimensions

DO-204AL(DO-41)



Dimensions in millimeters

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