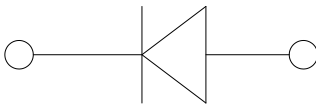
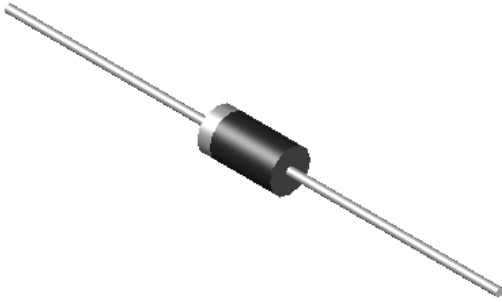


Fast Recovery Rectifier



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-201AD(DO-27)
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	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
Device marking code			FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=50°C	IF(AV)	A	3.0						
Forward Surge Current(Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	IFSM	A	125						
Storage Temperature	Tstg	°C	-55 ~+150						
Junction Temperature	Tj	°C	-55~+150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	IFM=3.0A	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.	35						

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

PARAMETER	SYMBOL	UNIT	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	30						



FR301G THRU FR307G

Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FR301G~FR307G	D1	Approximate 1.05	1250	1250	12500	Tape
FR301G~FR307G	C1	Approximate 1.05	250	250	12500	Bulk

Characteristics (Typical)

FIG.1: Io-Ta Curve

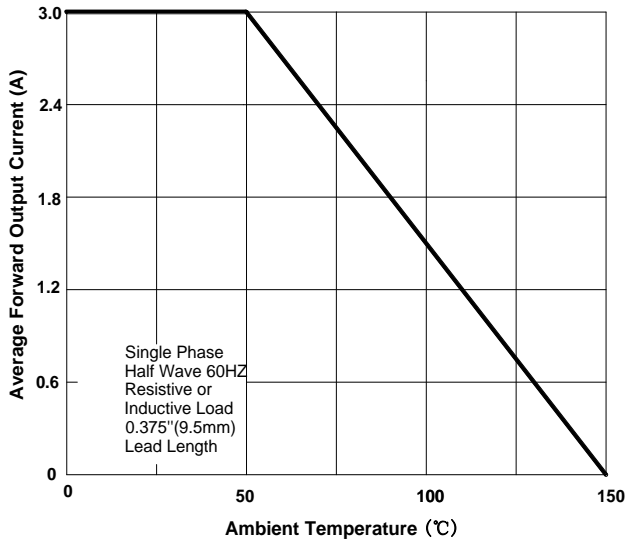


FIG.2: Forward Surge Current Capability

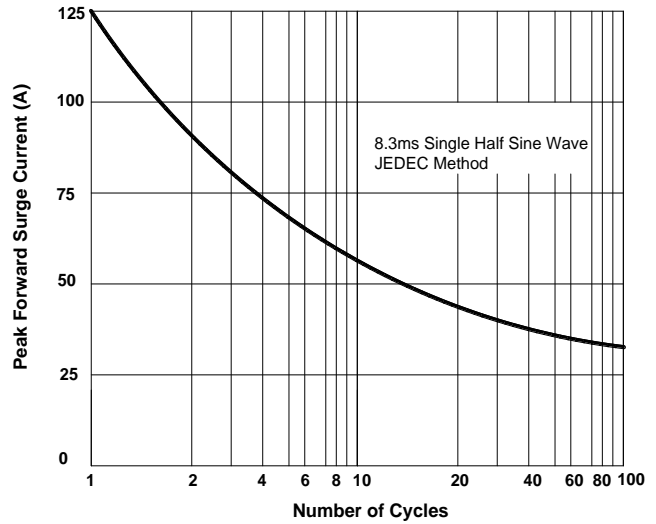


FIG.3: Forward Voltage

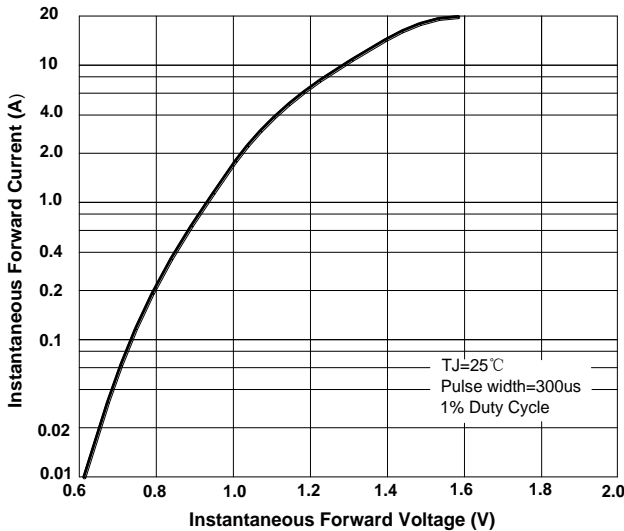


FIG.4: Typical Reverse Characteristics

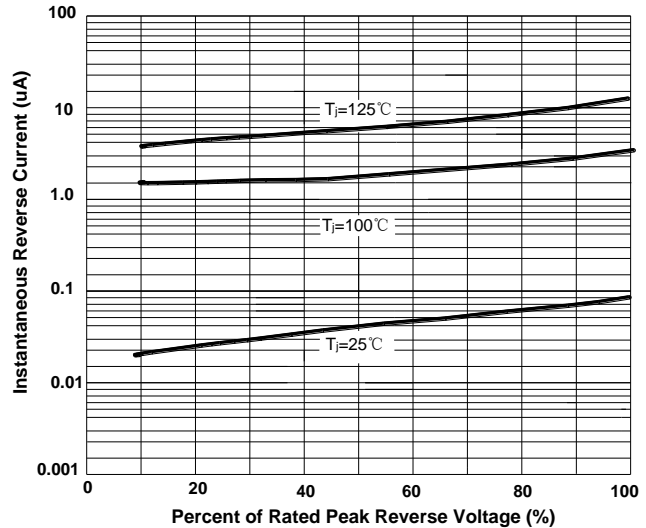
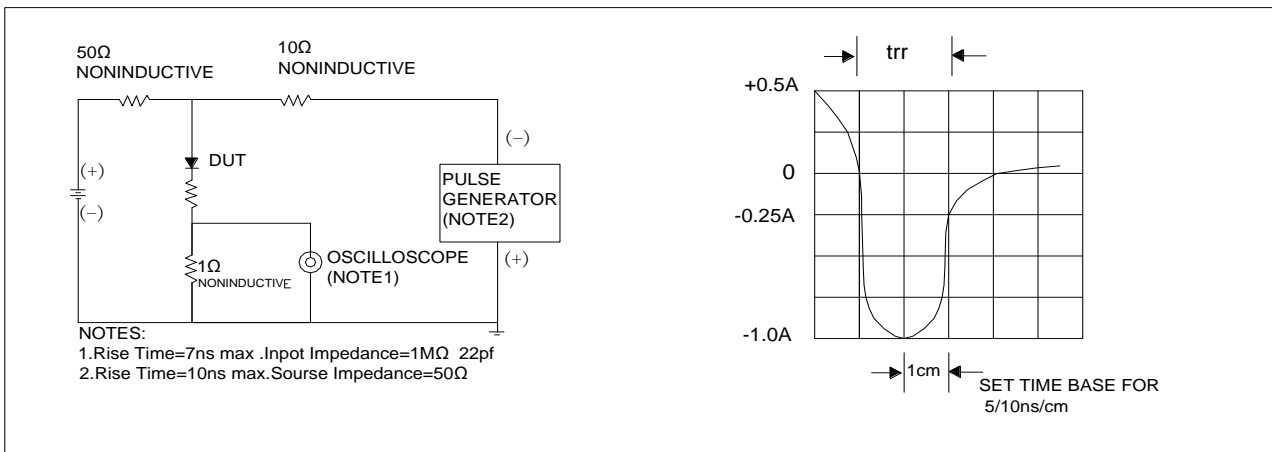
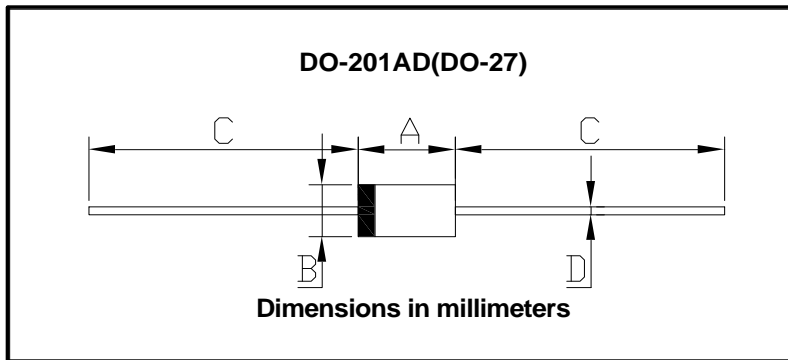


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ Outline Dimensions



DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30



FR301G THRU FR307G

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