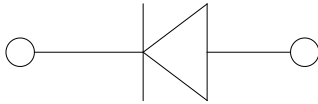
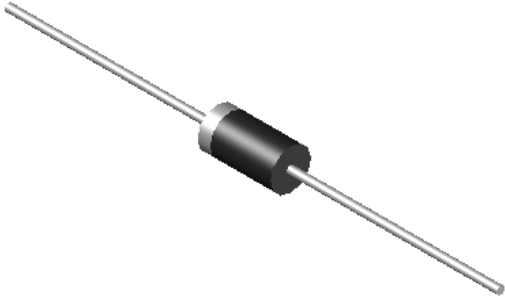




Fast Recovery Rectifier



Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- 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 (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FR301	FR302	FR303	FR304	FR305	FR306	FR307
Device marking code			FR301	FR302	FR303	FR304G	FR305	FR306	FR307
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T _a =50°C	I _{F(AV)}	A	3.0						
Forward Surge Current(Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	125						
Storage Temperature	T _{stg}	°C	-55 ~+150						
Junction Temperature	T _j	°C	-55~+125						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	FR301	FR302	FR303	FR304	FR305	FR306	FR307
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =3.0A	1.3						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	μA	T _a =25°C	2.5						
	I _{RRM2}		T _a =100°C	100						
Reverse Recovery time	trr	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.	55						

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

PARAMETER	SYMBOL	UNIT	FR301	FR302	FR303	FR304	FR305	FR306	FR307
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	20						



FR301 THRU FR307

Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FR301-FR307	D1	Approximate 1.05	1250	1250	12500	Tape
FR301-FR307	C1	Approximate 1.05	250	250	12500	Bulk

Characteristics (Typical)

FIG.1: I_o - T_a Curve

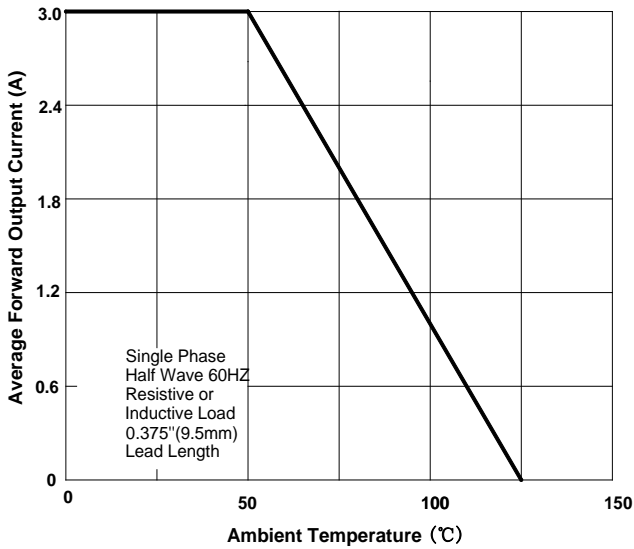


FIG.2: Forward Surge Current Capability

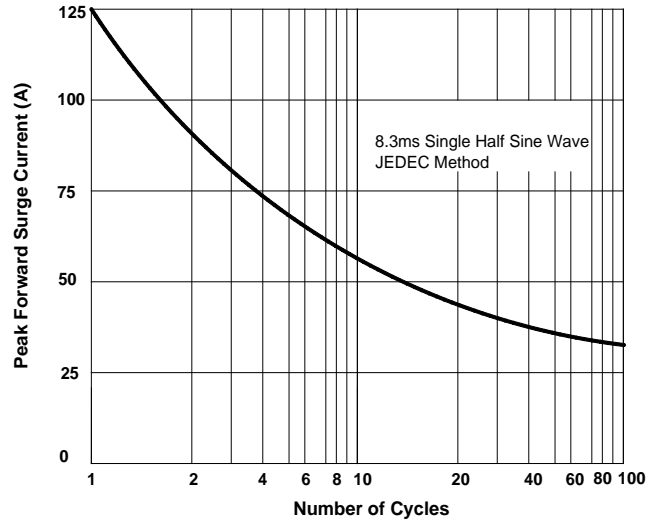


FIG.3: Forward Voltage

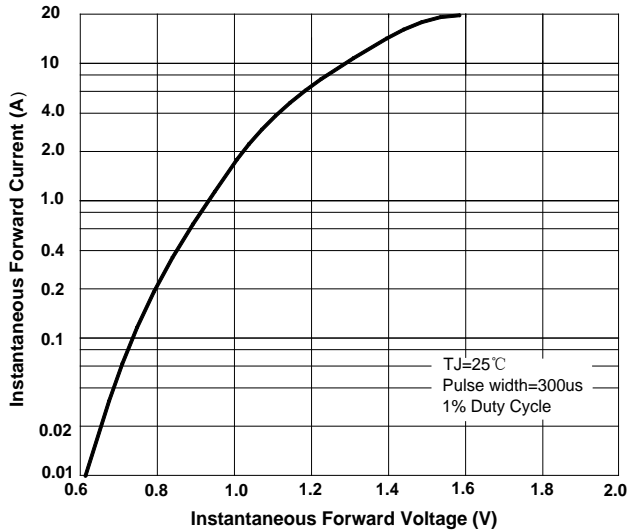
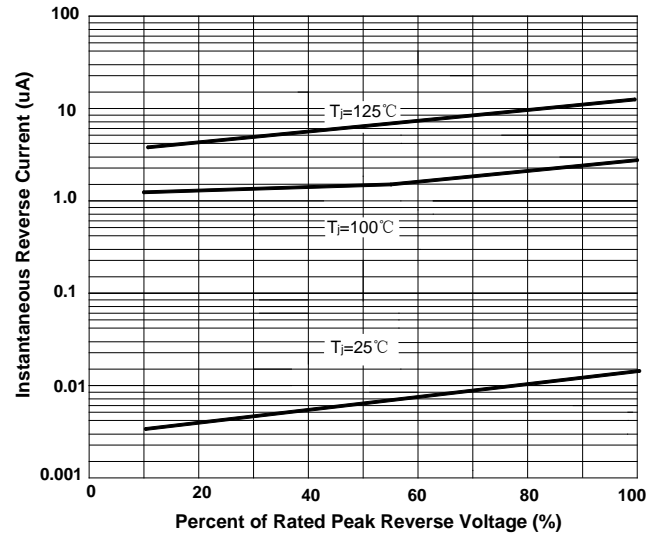


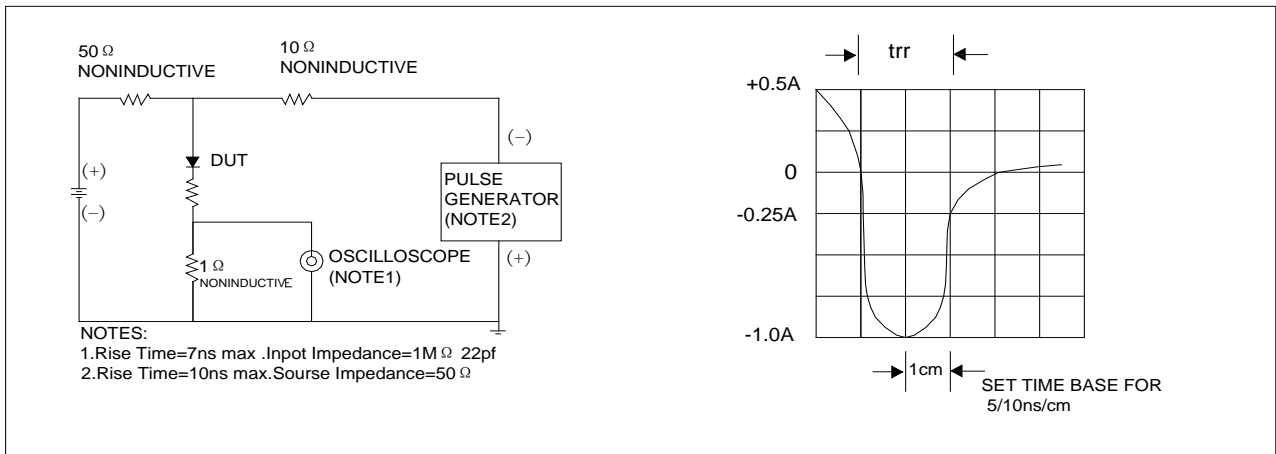
FIG.4: Typical Reverse Characteristics



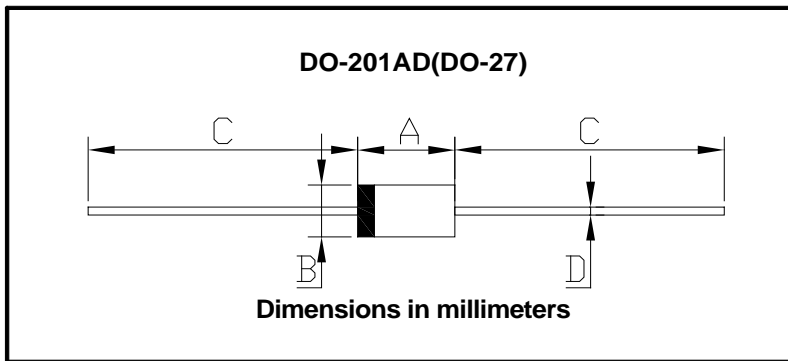


FR301 THRU FR307

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



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