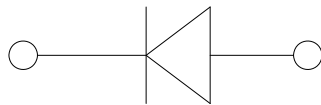
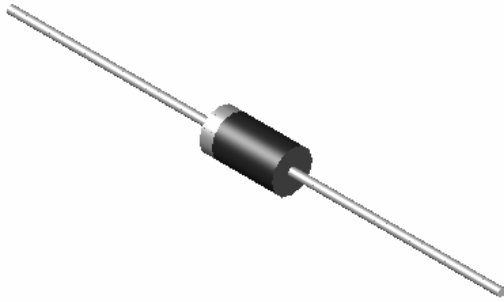


Fast Recovery Rectifier



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 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
Device marking code			FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
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, Ta=50	I _{F(AV)}	A	3.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25	I _{FSM}	A	125						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25			250						
Current squared time @1ms≤t≤8.3ms Tj=25 Rating of per diode	I ² t	A ² s	65						
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	Cj	pF	40				34	23	
Storage Temperature	Tstg		-55 ~ +150						
Junction Temperature	Tj		-55 ~ +150						

■Electrical Characteristics Ta=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=3.0A$	1.3						
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	Tj=25	2.5						
			Tj=125	100						
Maximum reverse recovery time	t_{rr}	ns	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	150				250	500	



FR301G THRU FR307G

■ Thermal Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
Typical Thermal Resistance	$R_{\theta JA}$	/W	30						

■ Ordering Information (Example)

PREFERED 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)

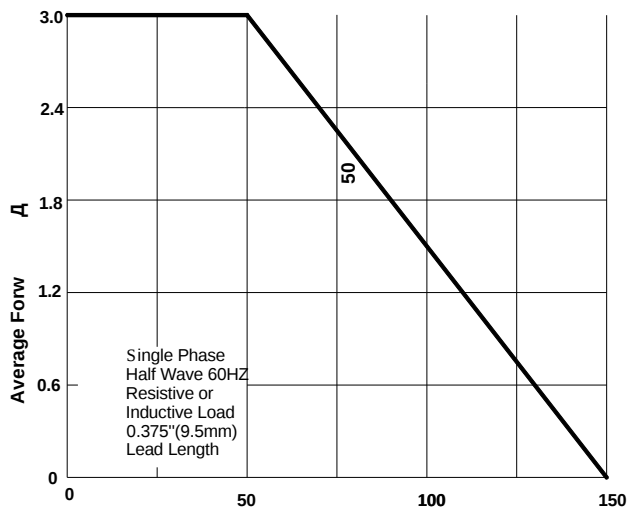
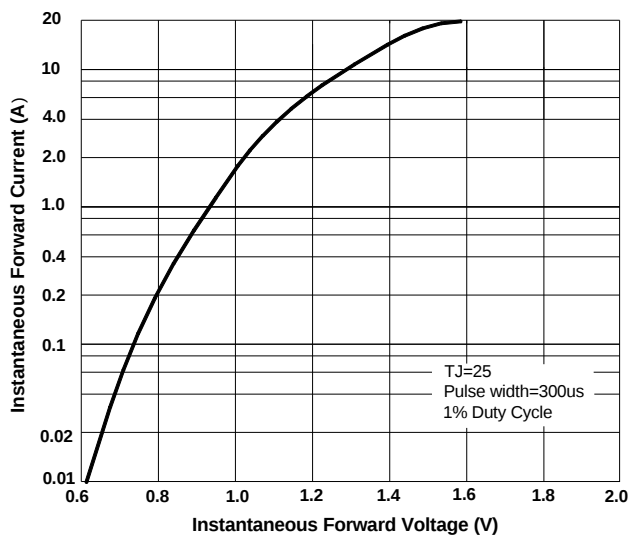


FIG.3: Forward Voltage





■ 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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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controller