Axial Leaded Fast Recovery Rectifiers

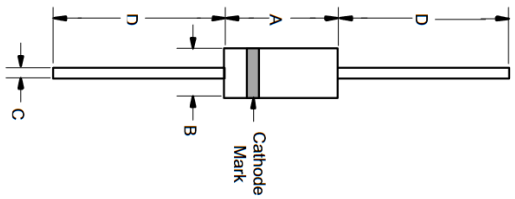
Features

- Pb-free and **RoHS** compliant
- Axial lead type devices for through hole design
- High current capability
- High surge capability
- Fast switching for high efficiency
- Glass passivation junction chip

Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case: Molded plastic, DO-201AD
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

Case dimensions



DO-201AD/DO-27

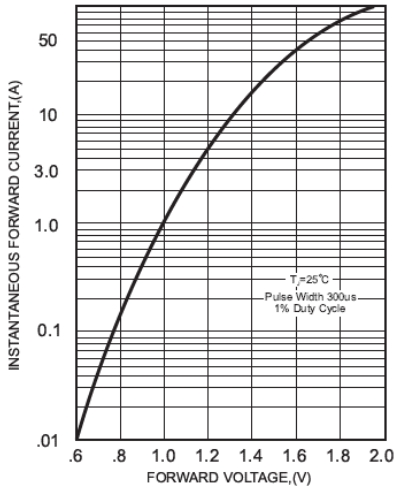
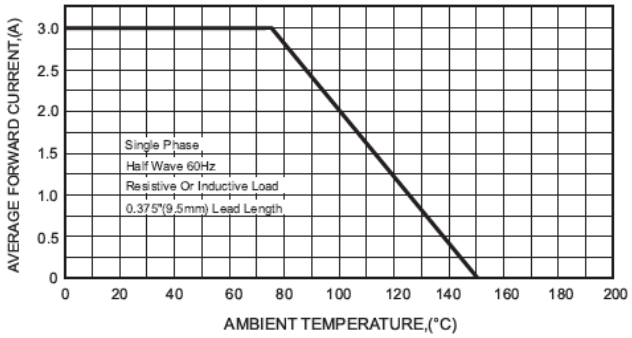
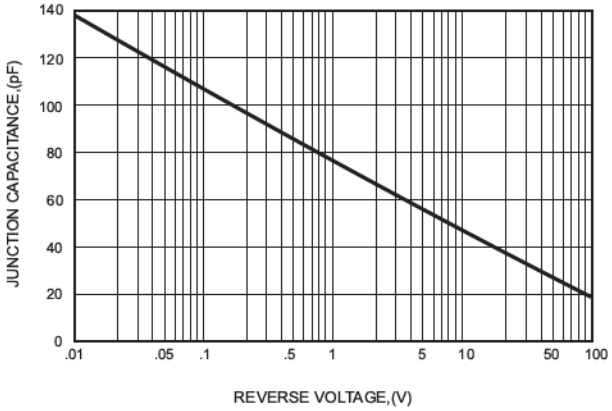
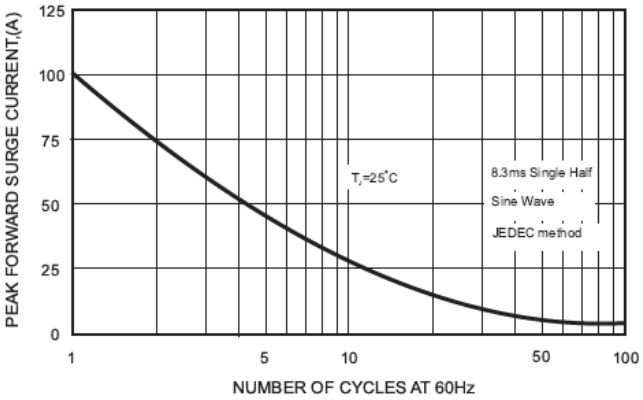
Unit	A	B	C	D
mm	9.5 MAX	5.6 MAX	1.30 MAX	24.0 MIN

Absolute maximum ratings and general electrical characteristics (T_a = 25°C)

Parameter		Symbol	MIN.	TYP.	MAX.	Unit
Forward rectified current		I_o			3.0	A
Forward surge current (8.3ms single half sine-wave (JEDEC method)		I_{FSM}			100	A
Diode junction capacitance		C_j		60		pF
Reverse current	V_R = V_{RRM}, T_j = 25C	I_R			5.0	μA
	V_R = V_{RRM}, T_j = 125				150	
Operating junction temperature and storage temperature range		T_j, T_{stg}	-55 ~ 150 / 65 ~ 175			°C

Absolute maximum ratings and general electrical characteristics (T_a = 25°C)

	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G
Repetitive peak reverse voltage V_{RRM}	50	100	200	400	600	800	1000
RMS voltage V_{RMS}	35	70	140	280	420	560	700
Continuous revers voltage V_R	50	100	200	400	600	800	1000
Maximum forward voltage $I_{F=}$ 3.0A	1.30						
Maximum reverse recover time $I_{F=}$ 0.5A/$I_{F=}$ 1.0A/$I_{F=}$ 0.25A	150				250	500	

Typical forward characteristic	Typical forward current derating curve
	
Typical junction capacitane	**Maximum non-repetitive forward surge current**
	

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