

FR301G~FR307G

GLASS PASSIVATED JUNCTION FAST RECOVERY RECTIFIER

VOLTAGE	50 to 1000 Volt	CURRENT	3 Ampere
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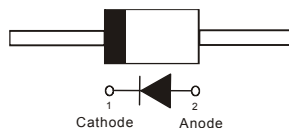
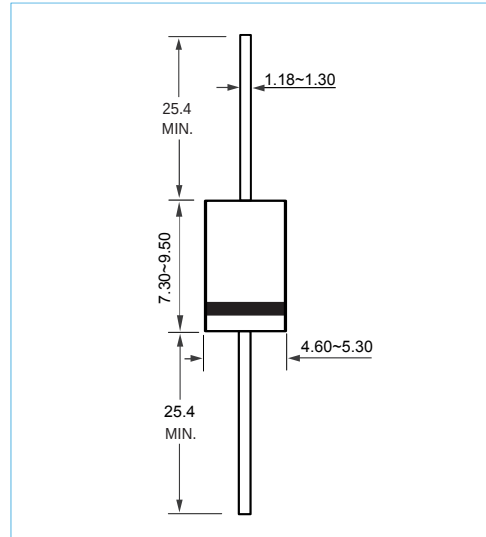
DO-201AD Unit:mm

FEATURES

- High current capability.
- Low leakage.
- Fast switching for high efficiency.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



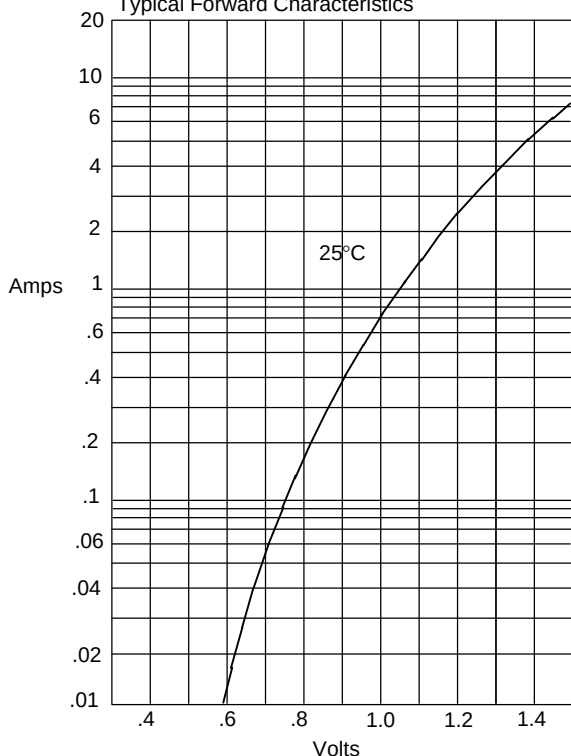
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current (see FIG.2)	I _{F(AV)}	3							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150							A
Maximum Forward Voltageat 3 A	V _F	1.3							V
Maximum DC Reverse Current at at Rated DC Blocking Voltage T _J =25°C T _J =100°C	I _R	5.0 100							μA
Typical Junction Capacitance	C _J	50							pF
Maximum Reverse Recovery Time	t _{rr}	150				250	500		ns
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to +150							°C

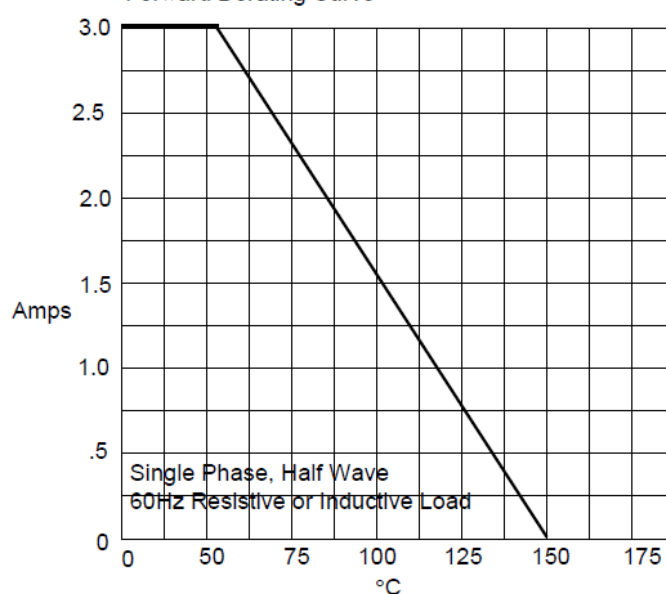
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Figure 1
Typical Forward Characteristics



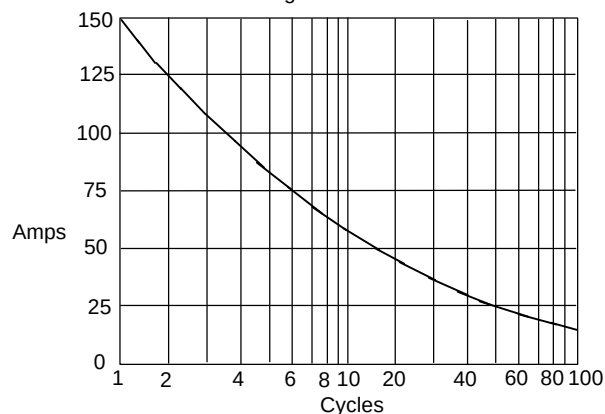
Instantaneous Forward Current - Amperes/versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



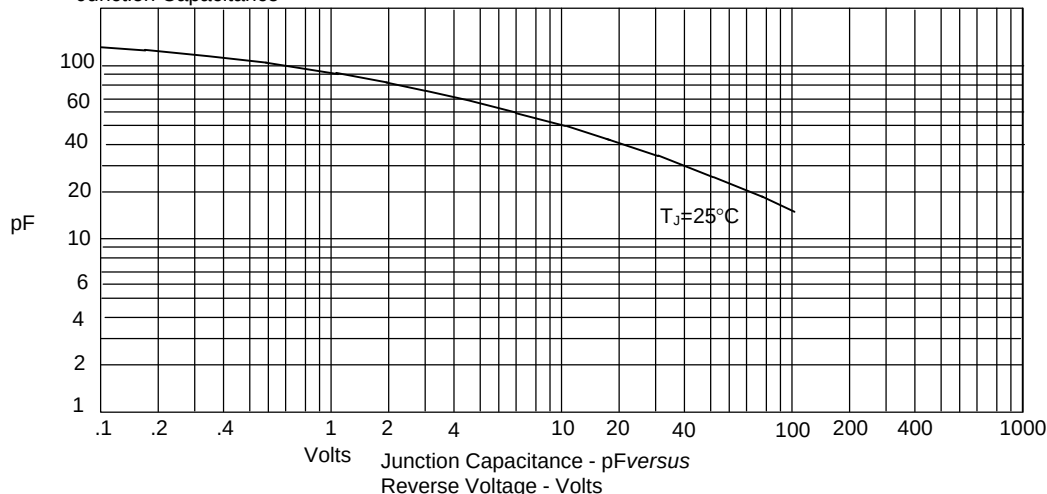
Average Forward Rectified Current - Amperes/versus
Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes/versus
Number Of Cycles At 60Hz - Cycles

Figure 3
Junction Capacitance



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Ordering Information

- Packing information

FR301G~FR307G	Packing Quantity
Tape&Reel	13 Inch; 1.25kpcs/Reel
Ammo Packing	1.25kpcs/Ammo Box
Bulk(Tube/Box)	0.5kpcs/Box