



TAYCHIPST

GLASS PASSIVATED FAST RECOVERY RECTIFIERS

FR201G-FR207G

50V-1000V

2.0A

FEATURES

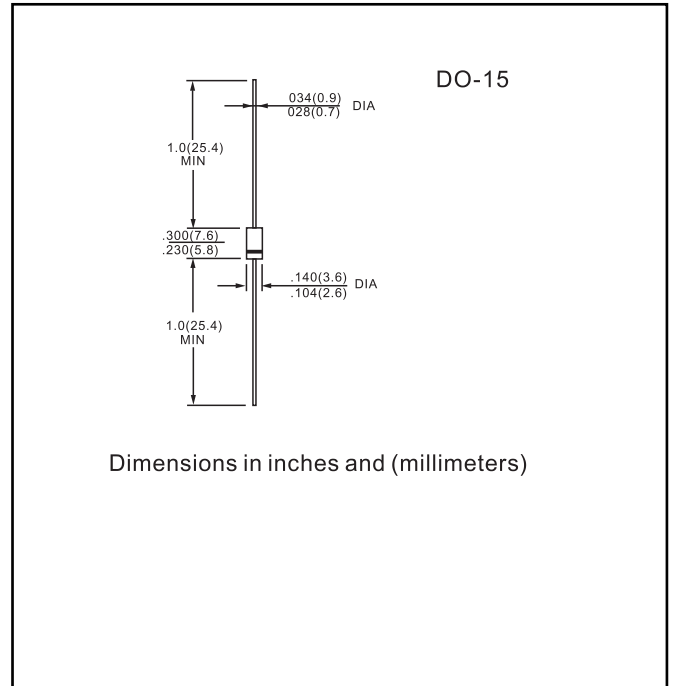
- * High reliability
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * Glass passivated junction
- * High switching capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.38 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



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TYPE NUMBER	FR201G	FR202G	FR203G	FR204G	FR205G	FR206G	FR207G	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=55°C								2.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								70	A
Maximum Instantaneous Forward Voltage at 2.0A								1.3	V
Maximum DC Reverse Current Ta=25°C								5.0	µA
at Rated DC Blocking Voltage Ta=100°C								100	µA
Maximum Reverse Recovery Time (Note 1)					150	250	500	nS	
Typical Junction Capacitance (Note 2)								40	pF
Operating and Storage Temperature Range Tj, Tstg								-65 — +150	°C

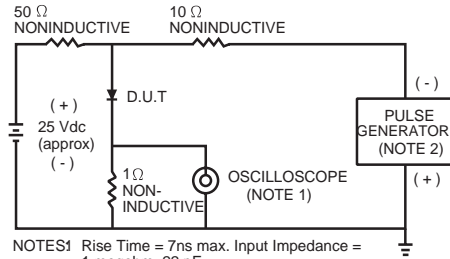
NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



RATING AND CHARACTERISTIC CURVES (FR201G THRU FR207G)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES1 Rise Time = 7ns max. Input Impedance = 1 megohm, 22 pF.
2. Rise Time = 10ns max. Source Impedance = 50 ohms.

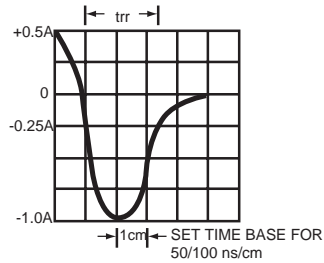


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

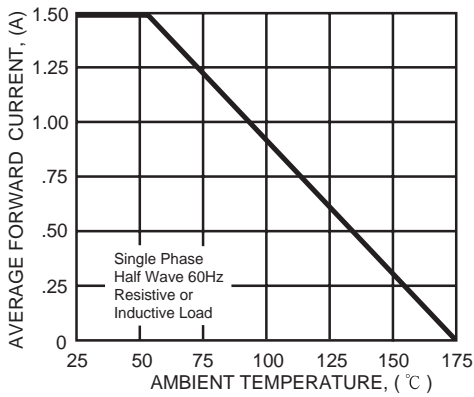


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

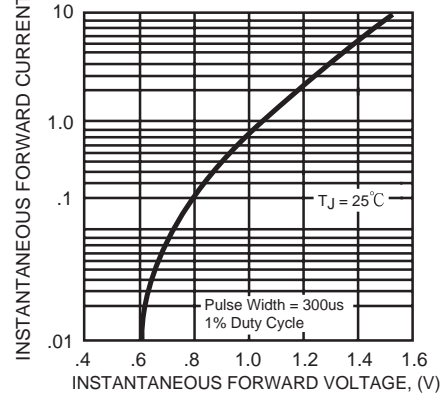


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

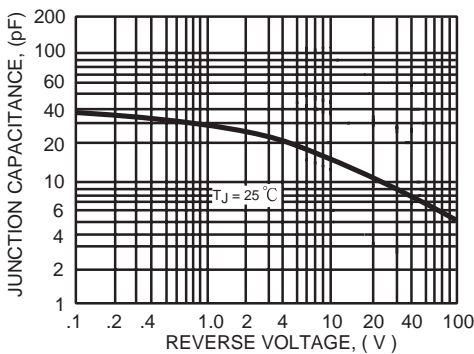


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

