

FAST RECOVERY GLASS PASSIVATED RECTIFIER

VOLTAGE RANGE 1200 to 3200 Volts CURRENT 0.5 to 0.2 Ampere

FEATURES

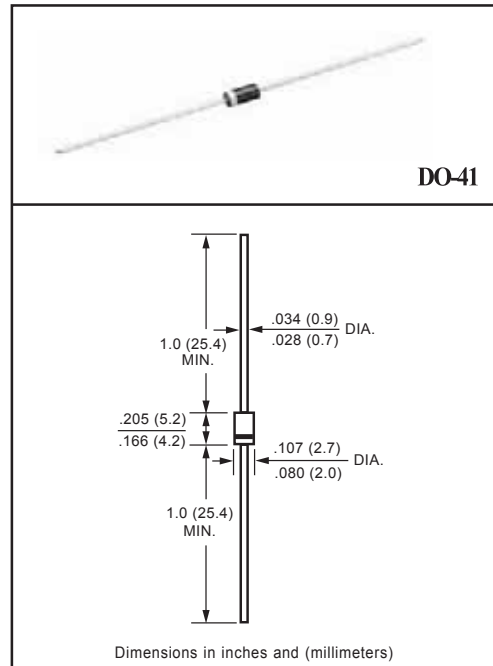
- *Fast switching
- *Low leakage
- *High current capability
- *High surge capability
- *High reliability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.35 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%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	FR1200G	FR1500G	FR1800G	FR2000G	FR2500G	FR3000G	FR3200G	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	1200	1500	1800	2000	2500	3000	3200	Volts
Maximum RMS Volts	VRMS	840	1050	1260	1400	1750	2100	2240	Volts
Maximum DC Blocking Voltage	Vdc	1200	1500	1800	2000	2500	3000	3200	Volts
Maximum Average Forward Rectified Current at TA = 50°C	Io	500			200				mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							Amps
Typical Current Squarad Time	I²t	3.74							A²S
Typical Thermal Resistance (Note 2)	RθJA	65							°C/W
	RθJL	30							
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 175							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	FR1200G	FR1500G	FR1800G	FR2000G	FR2500G	FR3000G	FR3200G	UNITS
Maximum Instantaneous Forward Voltage at 0.5/0.2 A DC	V _F	2.5			4.0		5.0		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage T _A = 25°C	I _r	5.0							uAmps
Maximum Full Load Reverse Current Average, Full Cycle .375", (9.5mm) lead length at T _L = 55°C		100							uAmps
Maximum Reverse Recovery Time (Note1)	t _{rr}				500				nSec

NOTES : 1. Test Conditions: I_F = 0.5A, I_R = -1.0A, I_{RR} = -0.25A
2. Thermal Resistance : Mounted on PCB.

2018-08
REV:A

RATING AND CHARACTERISTIC CURVES (FR1200G THRU FR3200G)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

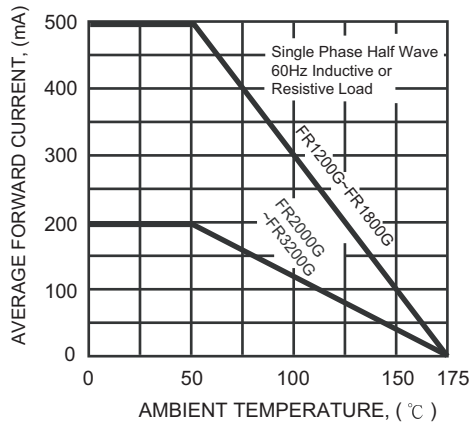


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

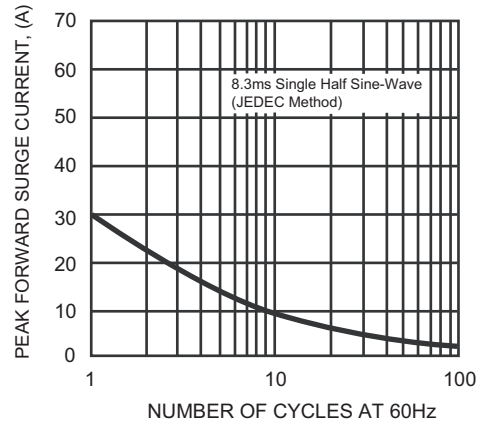
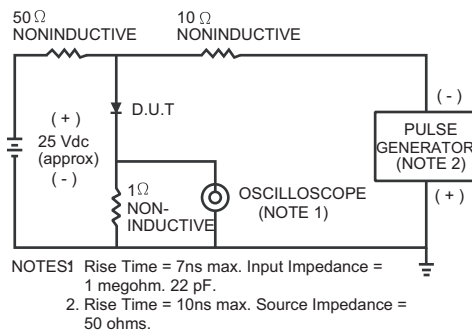
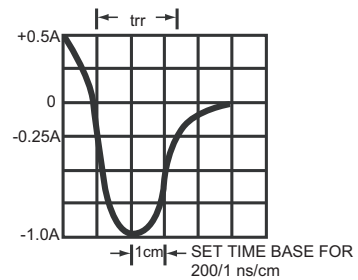
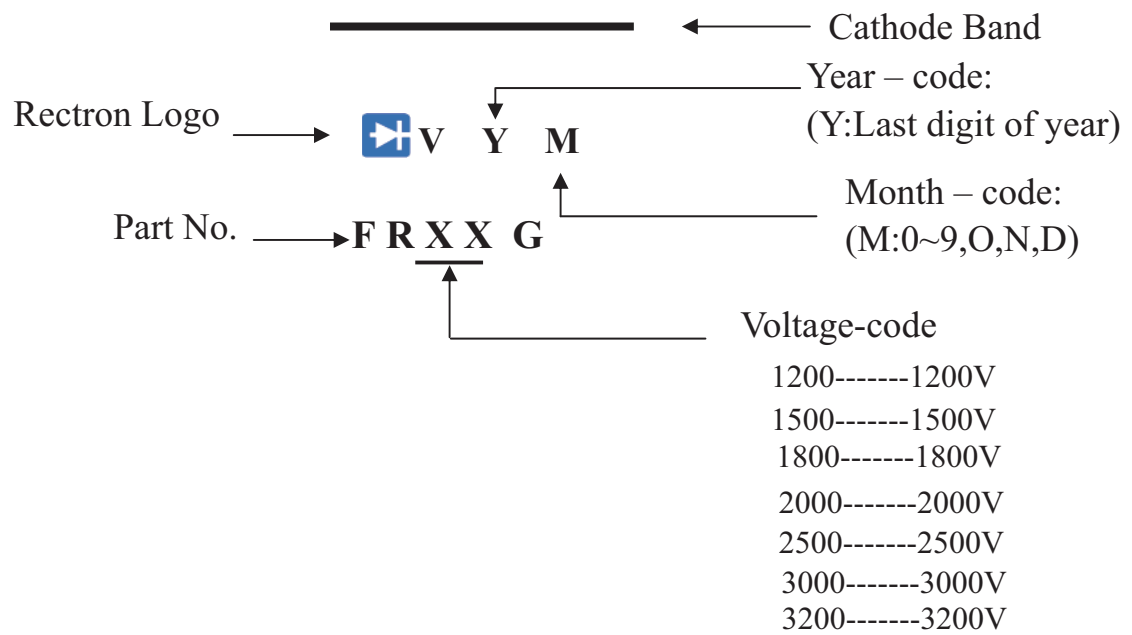


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-41	-B	1,000	194*75*21	415*220*255	50,000	16.2

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-41	-T	5,000	5,000	5.0	52	330	355*350*335	20,000	10.49

AMMO PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON (EA)	GROSS WEIGHT (Kg)
DO-41	-F	3,000	5.0	52	255*73*100	400*268*225	30,000	13.0
DO-41	-E	3,000	5.0	26	256*48*94	365*270*217	42,000	12.41

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