

Features

- ✧ Glass passivated chip junction
- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Low power loss
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode end
- ✧ High temperature soldering guaranteed: 260°C/10s
- ✧ Mounting position: Any
- ✧ Weight: 0.40 grams

Ordering Information (example)

Part No.	Package	Packing	INNER TAPE	Packing code	Packing code (Green)
FR201G	DO-15	1.5K / AMMO box	52mm	A0	A0G

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	FR 201G	FR 202G	FR 203G	FR 204G	FR 205G	FR 206G	FR 207G	Units
Maximum Recurrnet 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 Rectified Current	I _{F(AV)}	2							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	55							A
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A	V _F	1.3							V
Maximum DC Reverse Current at @ T _A =25 °C	I _R	5							uA
Rated DC Blocking Voltage @ T _A =125 °C		100							uA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	150				250	500		nS
Typical Junction Capacitance (Note 3)	C _j	20							pF
Typical Thermal Resistance	R _{θJA}	60							°C/W
Operating Temperature Range	T _J	- 55 to + 150							°C
Storage Temperature Range	T _{STG}	- 55 to + 150							°C

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (FR201G THRU FR207G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

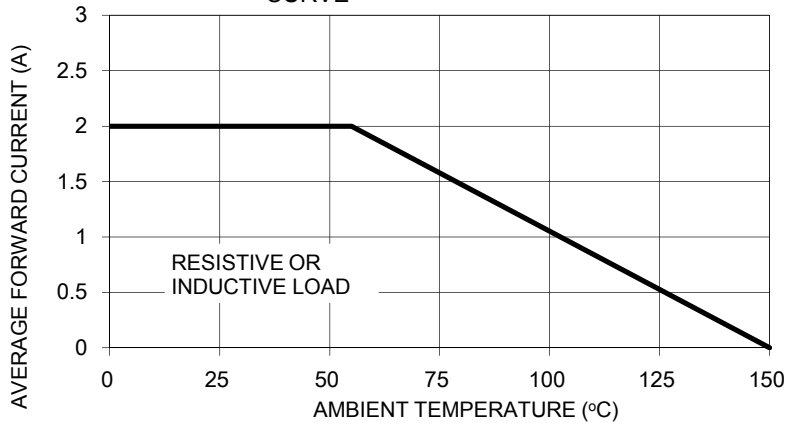


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

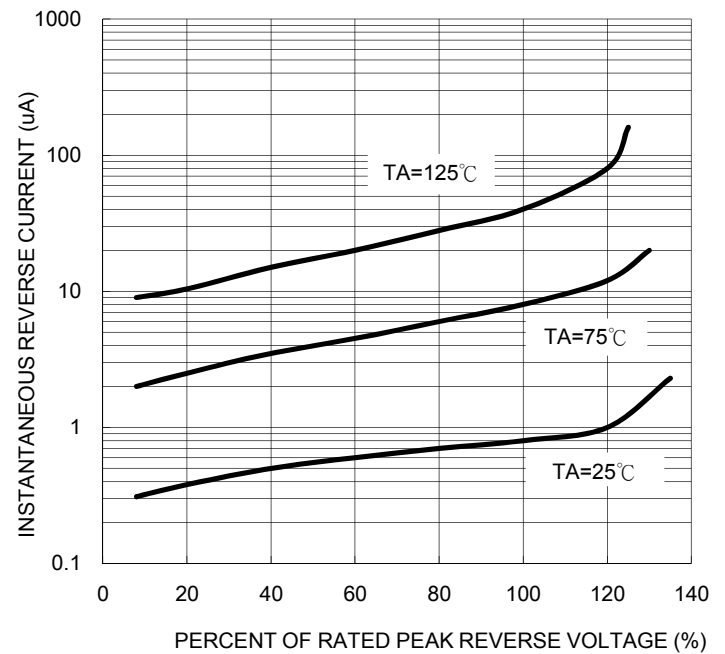


FIG. 3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

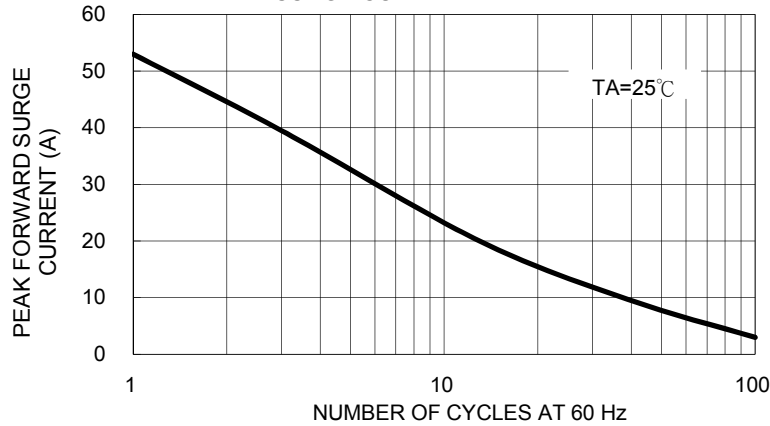


FIG. 5- TYPICAL FORWARD CHARACTERISTICS

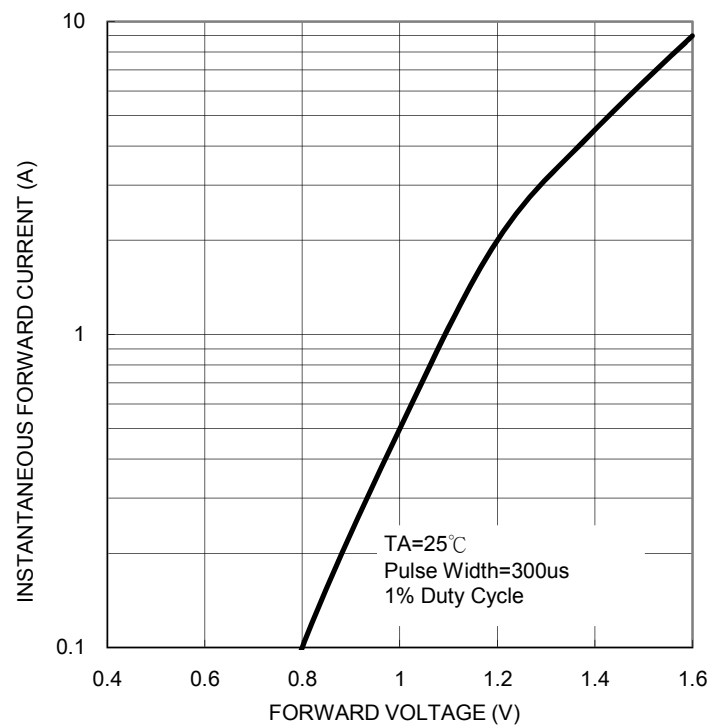


FIG. 4- TYPICAL JUNCTION CAPACITANCE

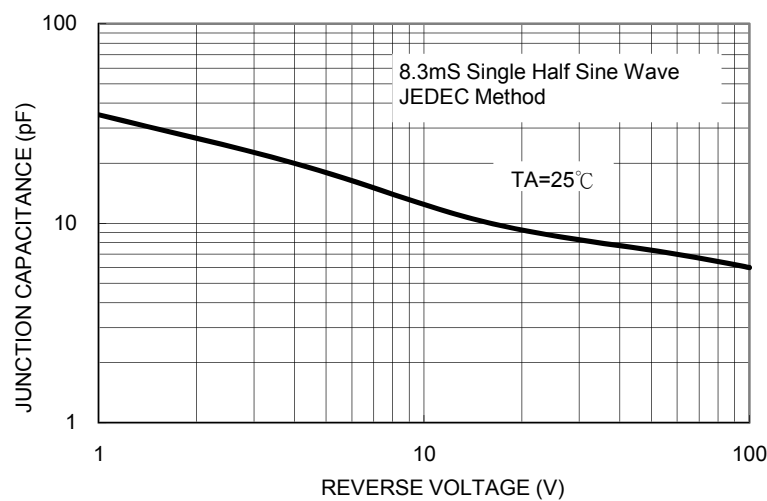
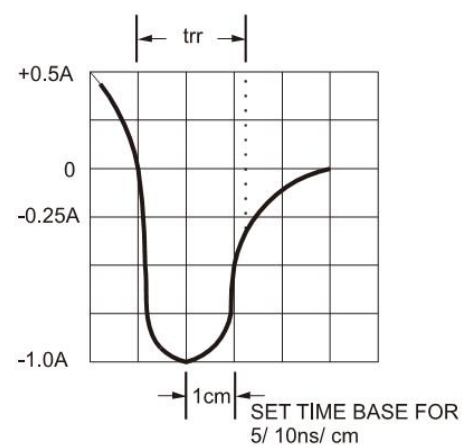
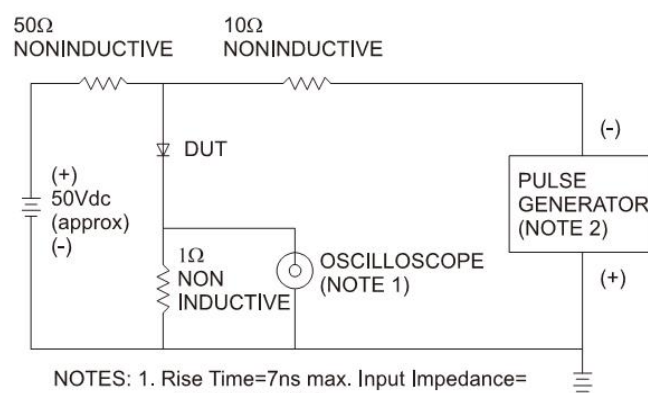


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

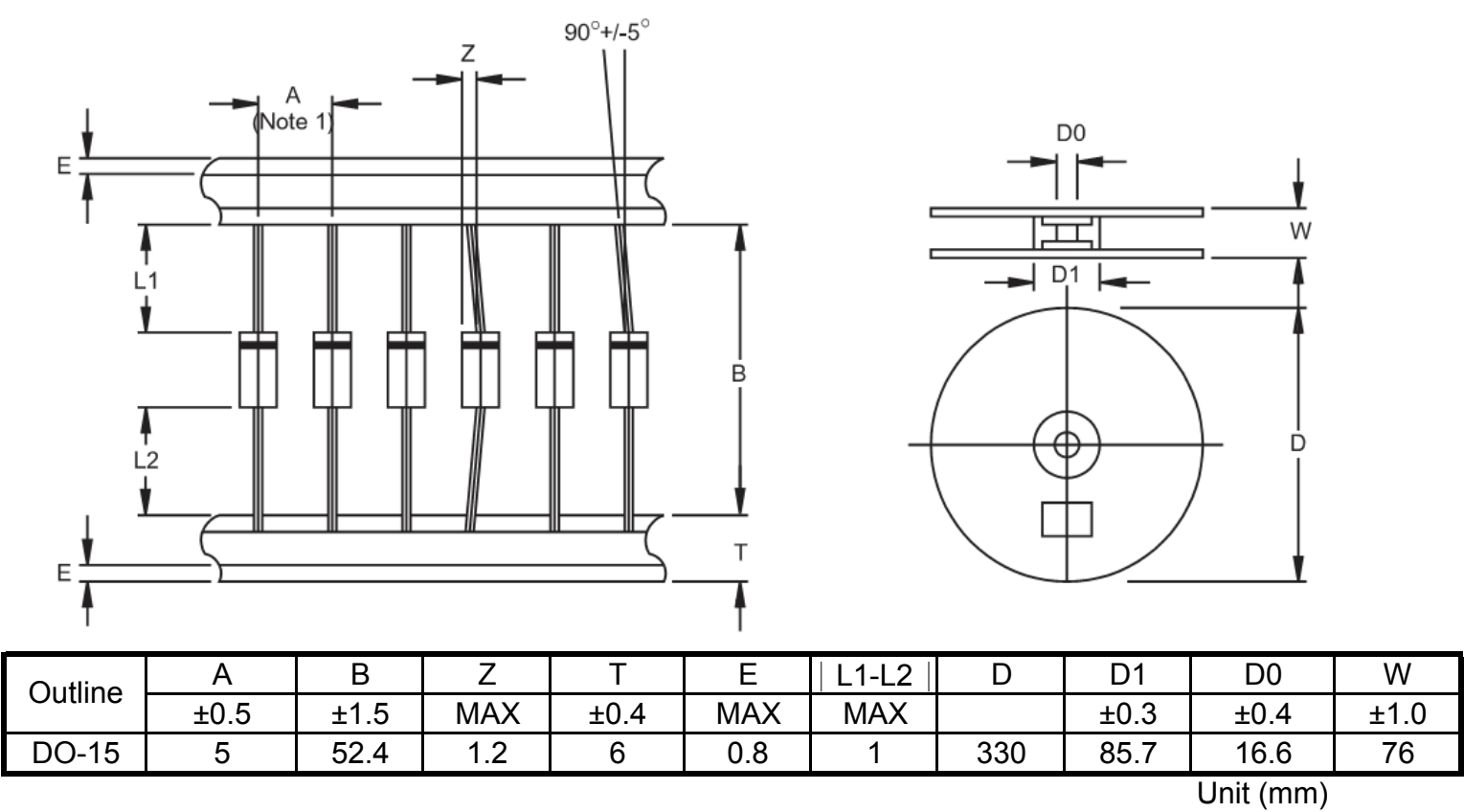


Ordering information

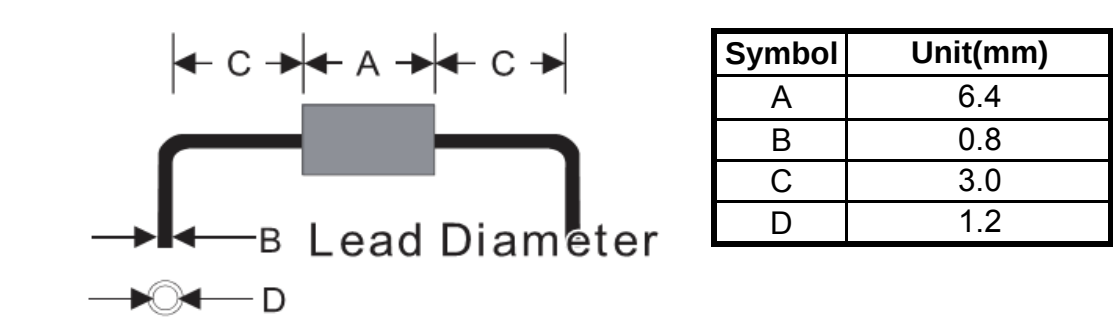
Part No.	Package	Packing	INNER TAPE	Packing code	Packing code (Green)
FR20xG (Note)	DO-15	1.5K / AMMO box	52mm	A0	A0G
	DO-15	3.5K / 13" Reel	52mm	R0	R0G
	DO-15	1K / Bulk packing		B0	B0G

Note: "x" is Device Code from "1" thru "7".

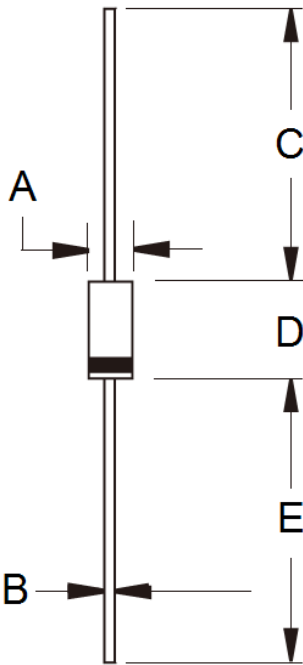
AXIAL LEAD TAPING SPECIFICATIONS



Suggested Mounting Hole Rule



Dimensions



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	2.60	3.60	0.102	0.142
B	0.70	0.90	0.028	0.035
C	25.40	-	1.000	-
D	5.80	7.60	0.228	0.299
E	25.40	-	1.000	-

Marking Diagram



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code