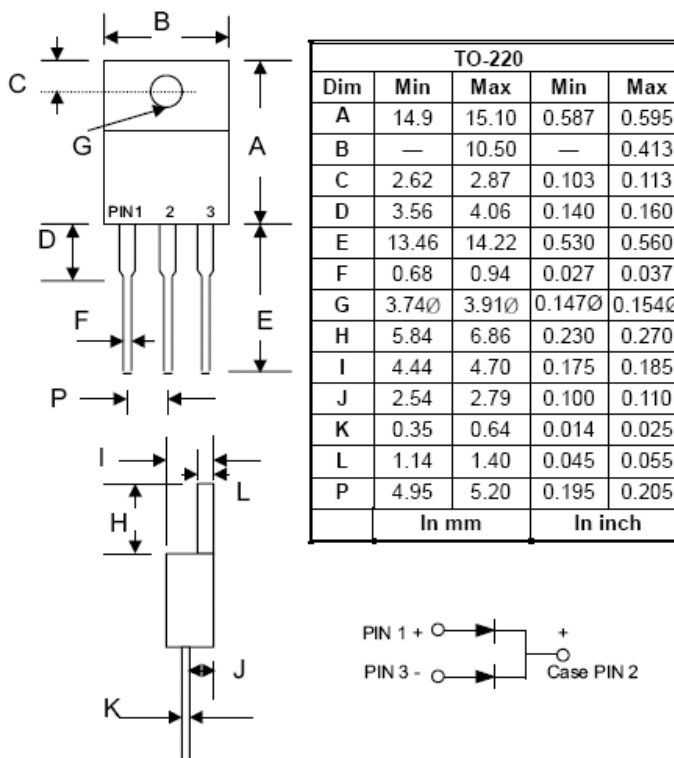


Features

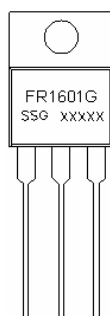
- Glass Passivated Die Construction
- Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Weight: 2.24 grams (approx.)
- Polarity: See Diagram
- Mounting Position: Any
- Marking: Type Number



Marking Diagram:



Where XXXXX is YYWWL

FR1601G = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping
FR1601G-FR1607G	TO-220 (Pb-Free)	50pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

• Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 ☎ (86) 25-87123907 •
• FAX (86) 25-87123900 • World Wide Web Site - <http://www.sangdest.com.cn> • E-Mail Address - sales@sangdest.com.cn •

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	FR 1601G	FR 1602G	FR 1603G	FR 1604G	FR 1605G	FR 1606G	FR 1607G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _C = 105°C	I _O	16							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							A
Forward Voltage									

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A. See figure 1.

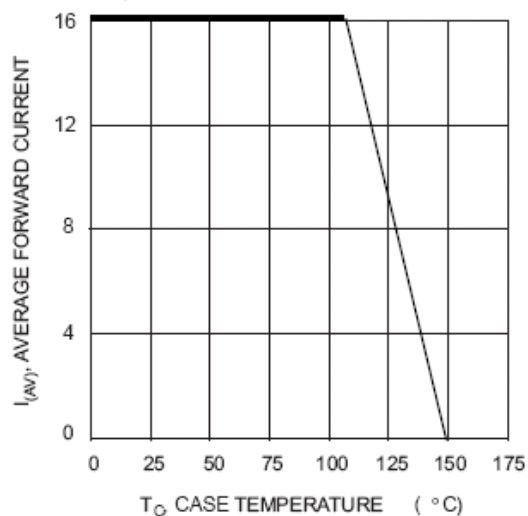


Fig. 1, Typical Forward Current Derating Curve

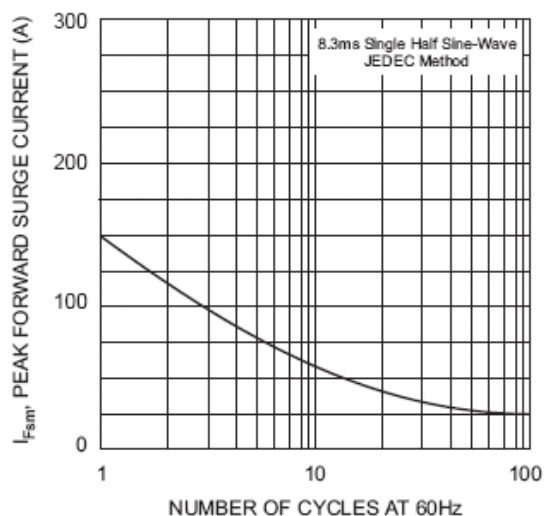


Fig. 2 Max Non-Repetitive Peak Surge Current

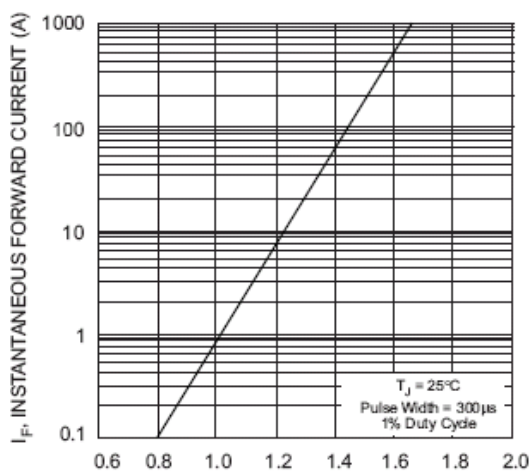


Fig. 3, Typical Instantaneous Forward Characteristics

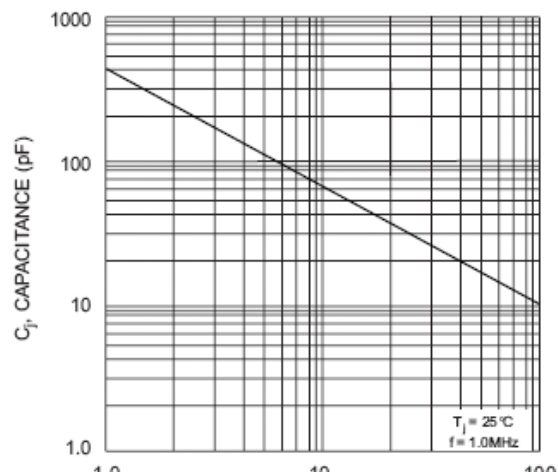
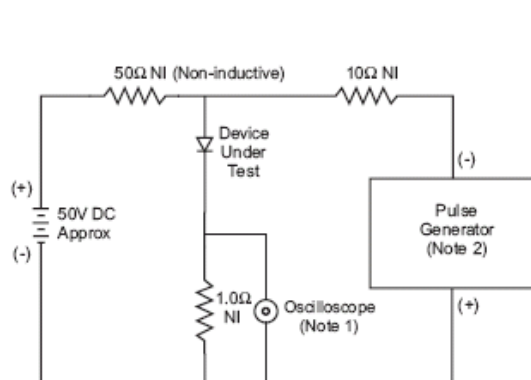


Fig. 4 Typical Junction Capacitance



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
2. Rise Time = 10ns max. Input Impedance = 50Ω.

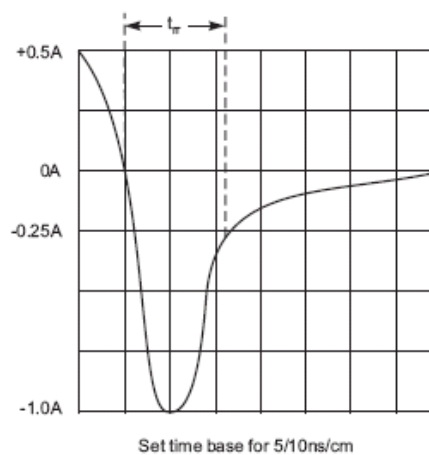


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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