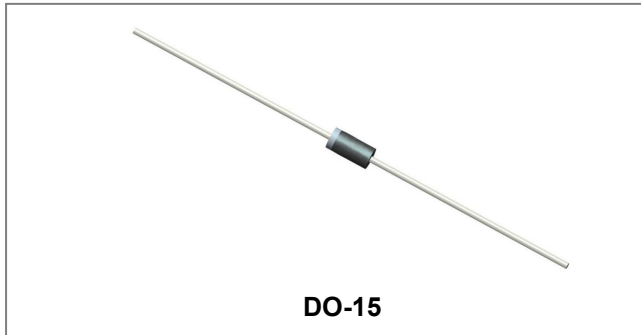


SF204G-SF208G SUPER FAST RECTIFIER



Features

- Super fast switching for high efficiency
- Low leakage current
- High forward surge capability
- Solder dip 260° C, 40 s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.40 grams

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

Characteristic	Symbol	SF204G	SF206G	SF208G	Units
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	V
Maximum RMS voltage	V _{RMS}	140	280	420	V
Maximum DC blocking voltage	V _{DC}	200	400	600	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at T _A =55°C	I _(AV)	2.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	75			A
Maximum instantaneous forward voltage at 2.0A	V _F	0.95	1.25	1.7	V
Maximum DC reverse current T _A =25 °C at rated DC blocking voltage T _A =100 °C	I _R	5.0 50.0			µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35			ns
Typical Junction Capacitance (Note 2)	C _J	50.0	30.0		pF
Typical Thermal Resistance (Note 3)	R _{θJA}	40.0			°C/W
Junction Temperature	T _J	-55 to +150			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

Note: 1. Reverse recovery condition I_F=0.5A, I_R=1.0A. I_{rr}=0.25A

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B mounted.

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Ratings and Characteristics Curves

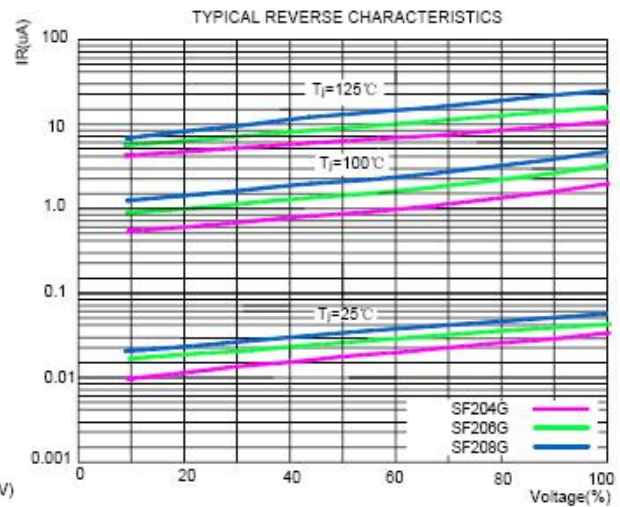
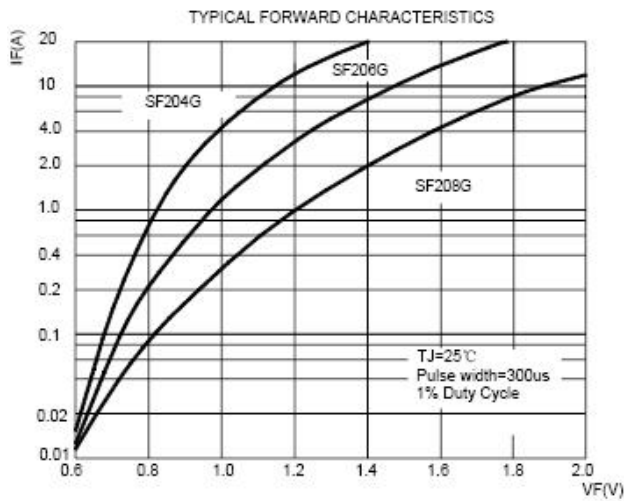
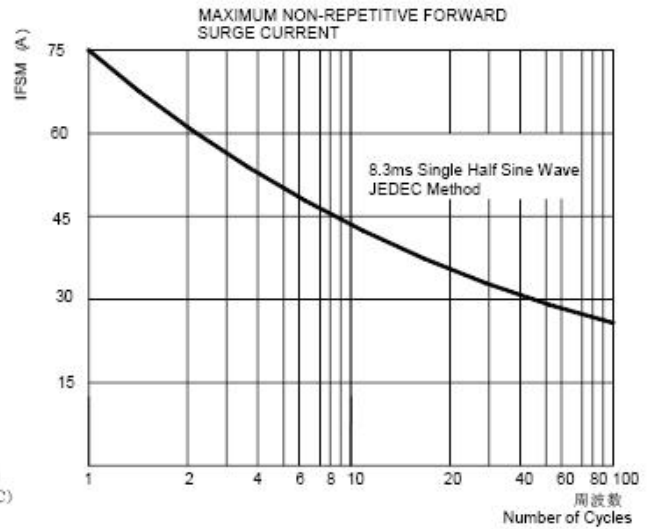
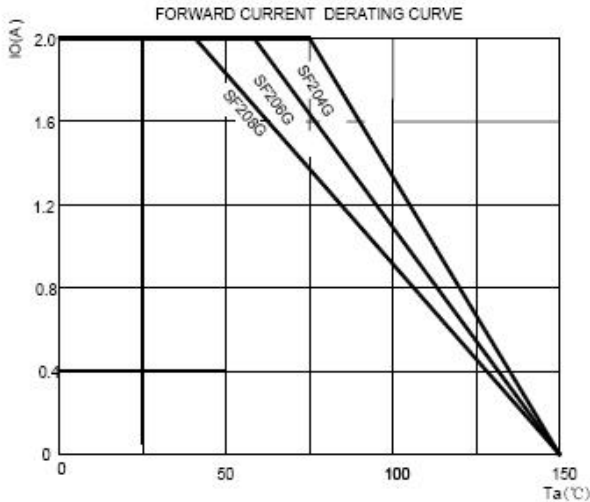
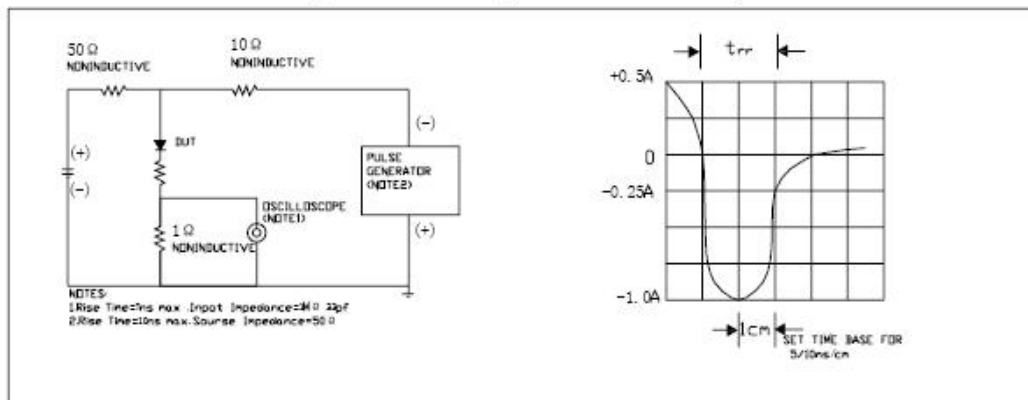
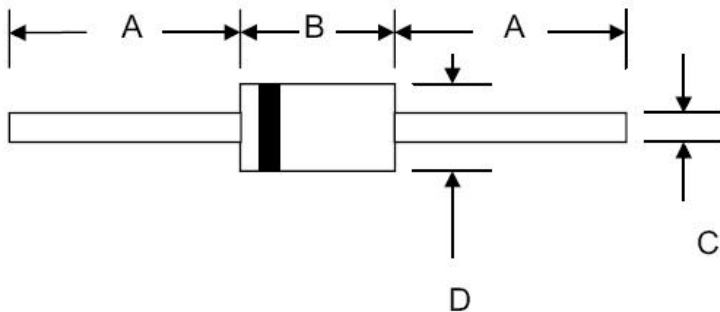


Diagram of circuit and Testing wave form of reverse recovery time



Mechanical Dimensions DO-15



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	5.5	7.62	0.217	0.300
C	0.7	0.9	0.028	0.034
D	2.6	3.6	0.104	0.140

Ordering Information

Device	Package	Shipping
SF204G THRU SF208G	DO-15 (Pb-Free)	3000pcs /tape
SF204GTA THRU SF208GTA	DO-15 (Pb-Free)	3000pcs /tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

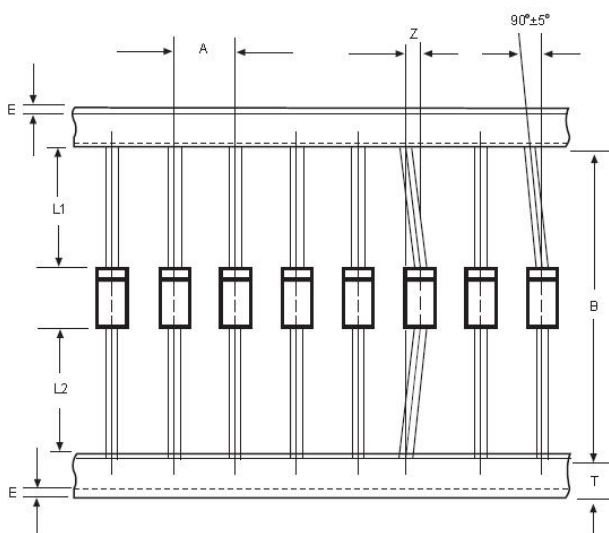


Where XXXXX is YYWWL

SF204G = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

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

Carrier Tape Specification DO-15



SYMBOL	Millimeters	
	Min.	Max.
A	4.50	5.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0

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