SF20GG(LS)

SUPER FAST GLASS PASSIVATED RECTIFIER

REVERSE VOLTAGE – 400 Volts FORWARD CURRENT – 2.0 Amperes

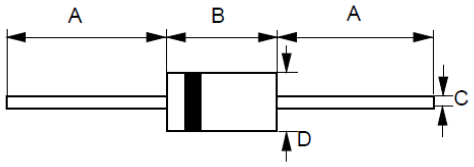
FEATURES

- Glass passivated chip
- Super fast switching time for high efficiency
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Qualified according to AEC-Q101 Rev_C
- Plastic material has UL flammability classification 94V-0
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Package : JEDEC DO-15 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.015 ounces, 0.4 grams
- Mounting position : Any

DO-15



DO-15		
Dim	Min.	Max.
A	25.4	-
B	5.80	7.60
C	0.71ø	0.86ø
D	2.60ø	3.60ø
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER		SYMBOL	SF20GG	UNIT
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	400	V
Maximum RMS Voltage		V_{RMS}	280	V
Maximum DC Blocking Voltage		V_{DC}	400	V
Maximum Average Forward Rectified Current	@T_A=75°C	$I_{(AV)}$	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)		I_{FSM}	60	A
Maximum forward Voltage at 2.0A DC		V_F	1.25	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_J =25°C @T_J =100°C	I_R	5 100	uA
Typical Junction Capacitance (Note 4)		C_T	40	pF
Typical Thermal Resistance (Note 5)		R_{thJA} R_{thJC}	35 16	°C/W
Maximum Reverse Recovery Time (Note 6)		t_{rr}	40	ns
Operating Temperature Range		T_J	-55 to +150	°C
Storage Temperature Range		T_{STG}	-55 to +150	°C

Note :

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
5. Thermal Resistance Junction to Ambient.
6. Measured with I_F=0.5A,I_R=1.0A,I_{rr}=0.25A.

RATING AND CHARACTERISTIC CURVES
SF20GG

FIG.1 - FORWARD CURRENT DERATING CURVE

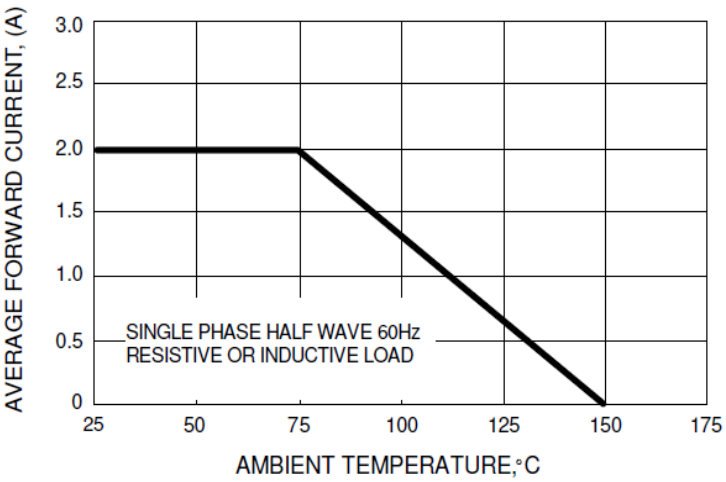


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

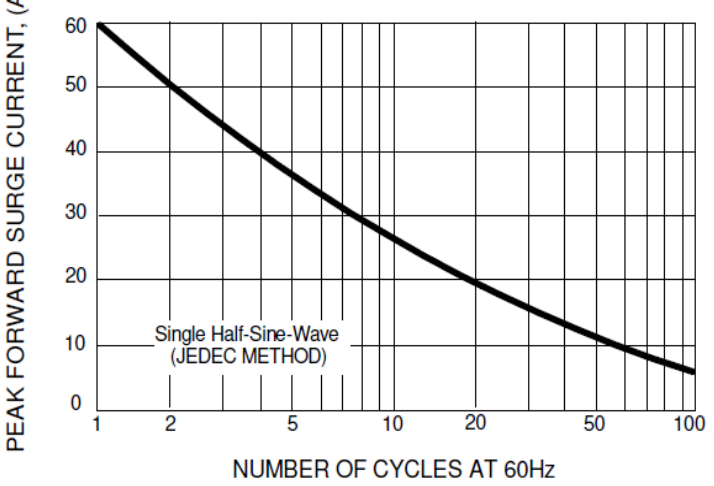


FIG.3 - TYPICAL JUNCTION CAPACITANCE

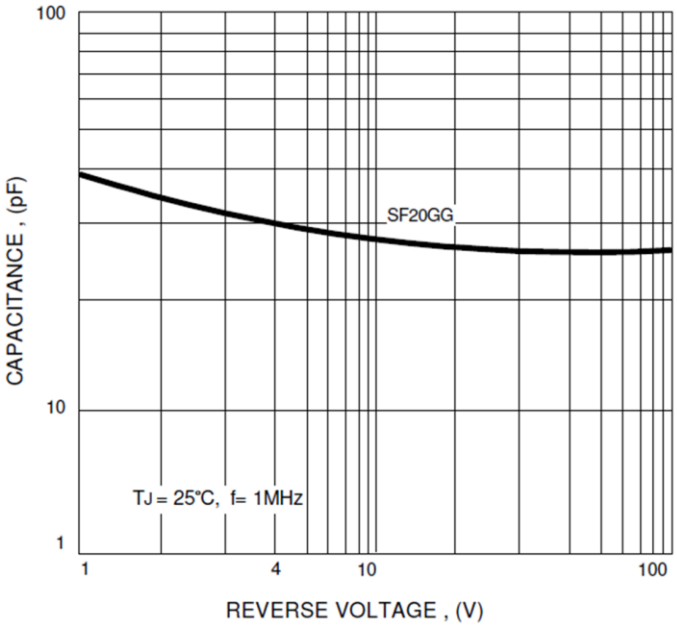
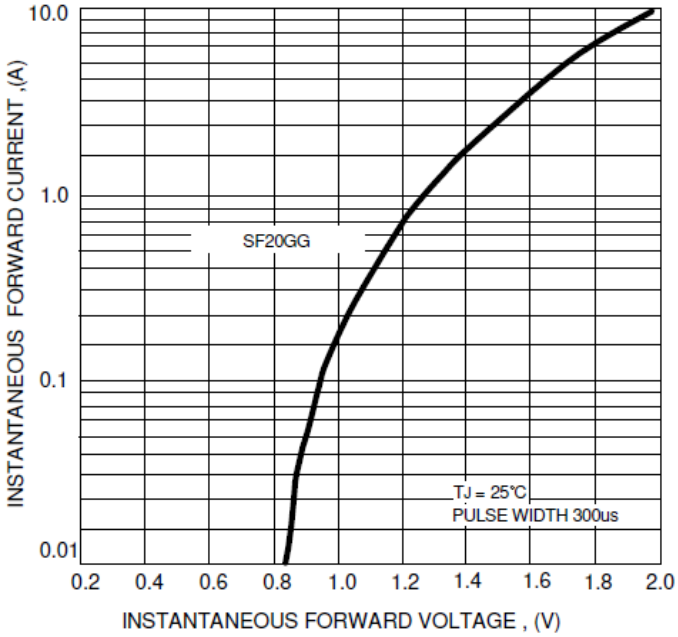


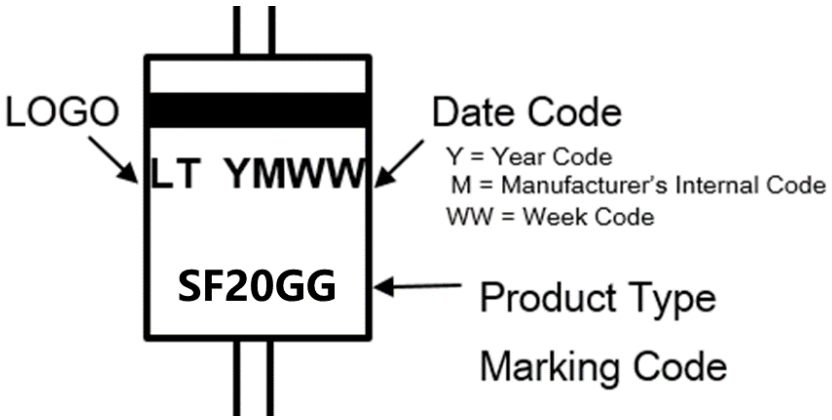
FIG.4 - TYPICAL FORWARD CHARACTERISTICS



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
SF20GG_HF	DO-15	4000pcs	Tape & Reel
SF20GG_HF-A52	DO-15	2000pcs	Ammo 52

Marking Information :



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