

**SUPER FAST
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - **100 to 600** Volts
FORWARD CURRENT - **2.0** Amperes

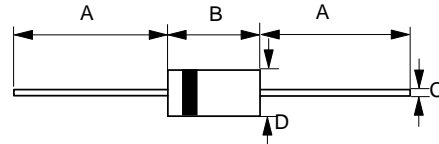
FEATURES

- Glass passivated chip
- Super fast switching time for high efficiency
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : JEDEC DO-15 molded plastic
- Polarity : Color band denotes cathode
- Lead Free Finish, RoHS Compliant
- 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	0.71 \varnothing	0.86 \varnothing
D	2.60 \varnothing	3.60 \varnothing
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	SF20BG	SF20DG	SF20FG	SF20GG	SF20HG	SF20JG	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	200	300	400	500	600	V
Maximum RMS Voltage	V _{RMS}	70	140	210	280	350	420	V
Maximum DC Blocking Voltage	V _{DC}	100	200	300	400	500	600	V
Maximum Average Forward Rectified Current @TA=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	0.95		1.25		1.3		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 1)	C _J	40				30		pF
Typical Thermal Resistance (Note 2)	RθJA RθJC	35 16						°C/W
Maximum Reverse Recovery Time (Note 3)	T _{RR}	35		40		50		ns
Operating Temperature Range	T _J	-55 to +150						°C
Storage Temperature Range	T _{STG}	-55 to +150						°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Thermal Resistance Junction to Ambient.

3.Measured with I_F=0.5A,I_R=1.0A,I_{RR}=0.25A..

REV. 8, Jul-2017, KDGD01

FIG.1 - FORWARD CURRENT DERATING CURVE

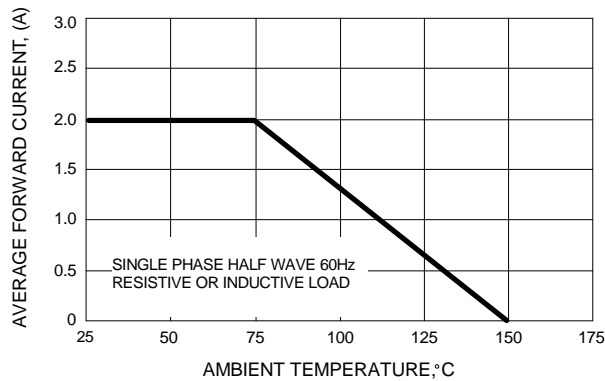


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

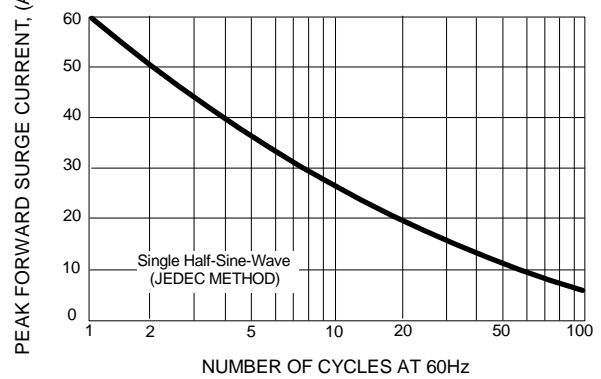


FIG.5 - TYPICAL JUNCTION CAPACITANCE

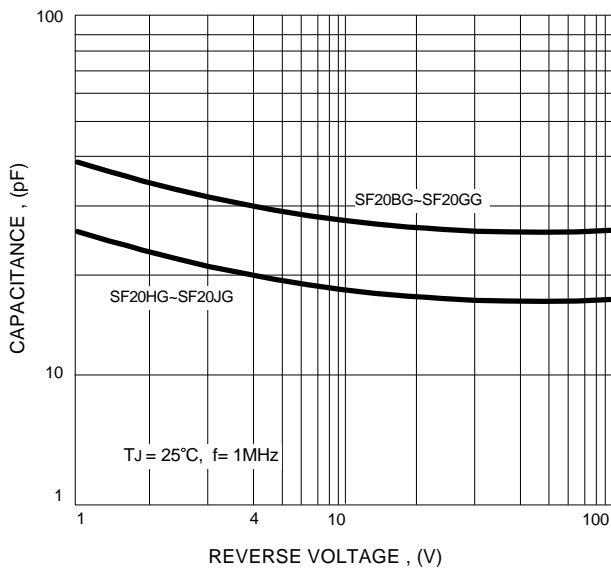
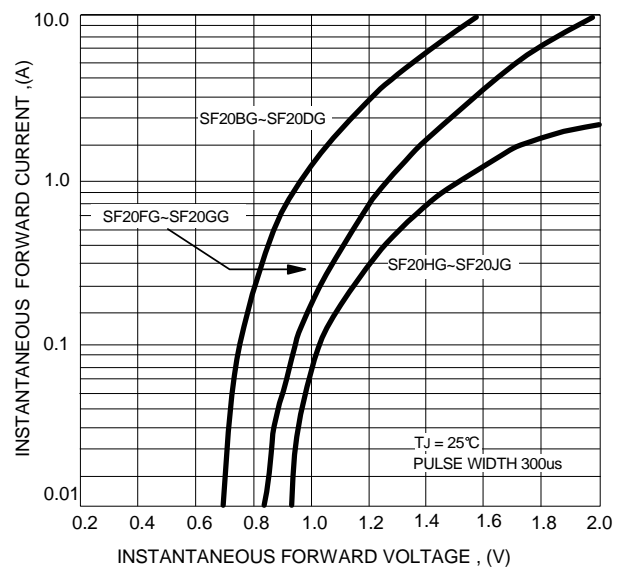


FIG.4 - TYPICAL FORWARD CHARACTERISTICS



Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.