DSK Diode Semiconductor Korea *SF11GL --- SF18GL*

GLASS PASSIVATED RECTIFIERS

VOLTAGE RANGE: 50 --- 600 V
CURRENT: 1.0 A

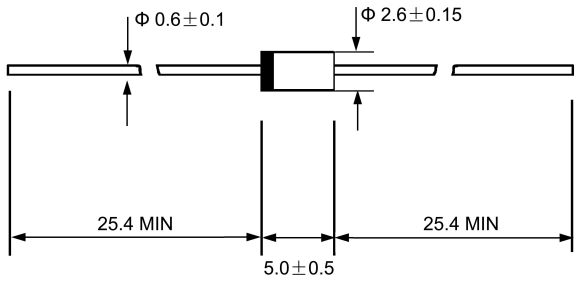
FEATURES

- ◇ The plastic package carries underwrites laboratory flammability classification 94V-O
- ◇ High current capability
- ◇ Low reverse leakage
- ◇ Glass passivated junction
- ◇ Low forward voltage drop
- ◇ High temperature soldering guaranteed: 350℃/10 seconds, 0.375"(9.5mm) lead length, 5lbs, (2.3kg) tension

MECHANICAL DATA

- ◇ Case:JEDEC A-405,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.008ounces,0.23 grams
- ◇ Mounting position: Any

A-405



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

		SF 11GL	SF 12GL	SF 13GL	SF 14GL	SF 15GL	SF 16GL	SF 17GL	SF 18GL	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	1.0								A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	30.0								A
Maximum instantaneous forw ard voltage @ 1.0 A	V_F	0.95				1.3		1.7		V
Maximum reverse recovery time (Note1)	t_{rr}	35								ns
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 100.0								μA
Typical junction capacitance (Note2)	C_J	50.0				25.0				pF
Operating junction temperature range	T_J	- 50 ---- + 175								℃
Storage temperature range	T_{STG}	- 50---- + 175								℃

NOTE: 1. Measured with I_F=0.5A,I_R=1.0A,I_{rr}=0.25A.
2.Measured at 1.0MHz and applied reverse v oltage of 4.0V DC.

FIG.1 --FORWARD CURRENT DERATING CURVE

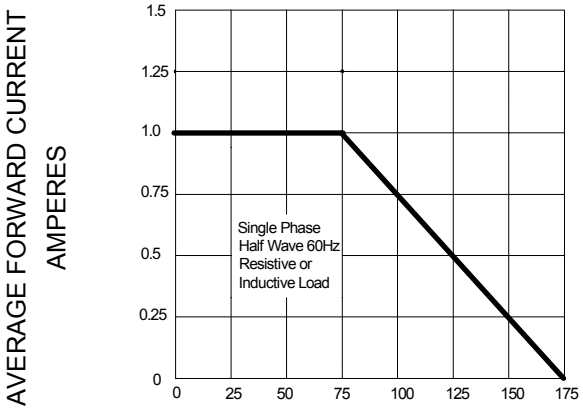


FIG.2 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

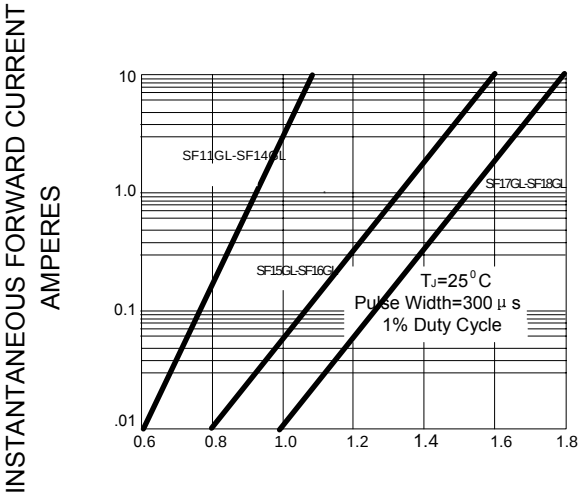


FIG.3 -- PEAK FORWARD SURGE CURRENT

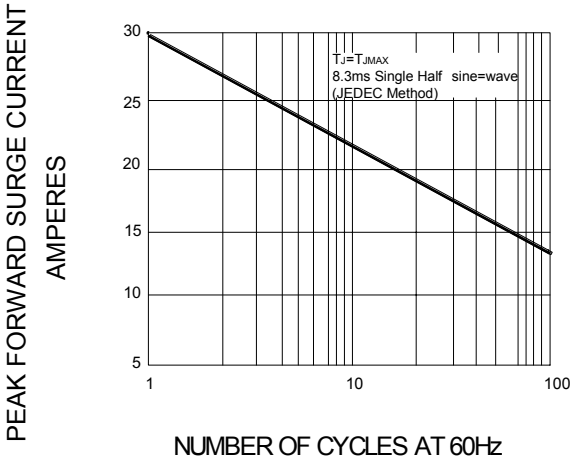


FIG.4 -- TYPICAL JUNCTION CAPACITANCE

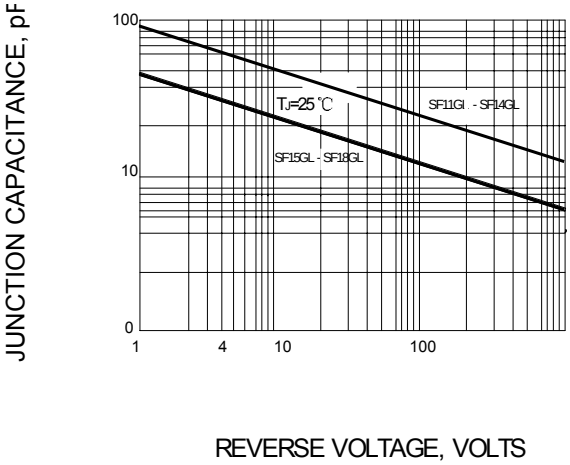


FIG.5 -- TYPICAL REVERSE CHARCTERISTICS

