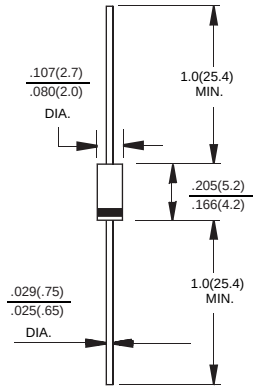
SF19G-SF110G

1.0AMP Glass Passivated Super Fast Rectifiers

Features

- ◇ High efficiency,low VF
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ Low power loss
- ◇ Low power loss,high effiency
- ◇ High current capability
- ◇ For use in low voltagek,high frequency inventor,free Wheeling,and polarity protection application.

DO-41



Dimensions in inches and (millimeters)

Mechanical Data

- ◇ Case:Molded plastic
- ◇ Epoxy:UL 94V-0 rated flame retardant
- ◇ Polarity:Color band denotes cathode
- ◇ High temperature soldering guaranteed: 260℃/10 seconds/.375",(9.5mm) lead Lengths at 5 lbs.,(2.3kg) tension
- ◇ Mounting position:ANY
- ◇ Weight:0.260 gram

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient tepmerature unless otherwise specified.

Single phase,half wave,60Hz,resistive or inductive load.

For capacitive load,derate current by 20%

Type Number	Symbol	SF19G	SF110G	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	800	1000	V
Maximum RMS voltage	V_{RMS}	560	700	V
Maximum DC blocking voltage	V_{DC}	800	1000	V
Maximum Average Forward Rectified Current .375(9.5mm) Lead Length @TA=55℃	$I_{F(AV)}$	1.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	30		A
Maximum Instantaneous Forward Voltage @1.0A	VF	2.2	2.2	V
Maximum DC Reverse current @T_A=25℃ at Rated DC Blocking Voltage @ T_A=125℃	IR	5.0 100		μ A
Maximum Reverse Recovery Time(Note1)	Trr	35		nS
Typical junction capacitance: VR=5.0v,f=1MHz	CJ	10		pF
Operating temperature range	T_J	-65 to +150		℃
Storage temperature range	T_{STG}	-65 to +150		℃

Notes: 1.Reverse Recovery Test Conditions:IF=0.5A,IR=1.0A,IRR=0.25A

2.Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

3.Mount on Cu-Pad Size 5mm x 5mm on PCB.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM AVERAGE FORWARD CURRENT DERATING

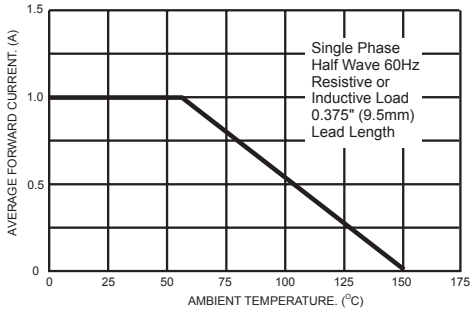


FIG.2- TYPICAL REVERSE CHARACTERISTICS

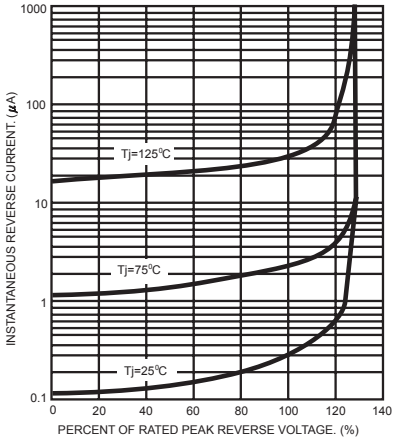


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

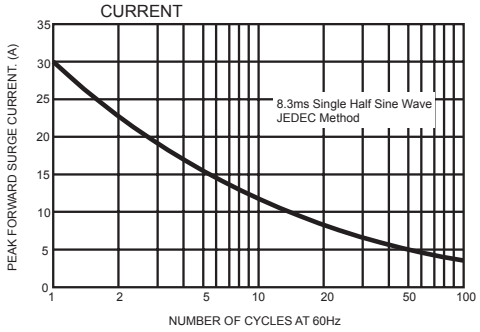


FIG.4- TYPICAL JUNCTION CAPACITANCE

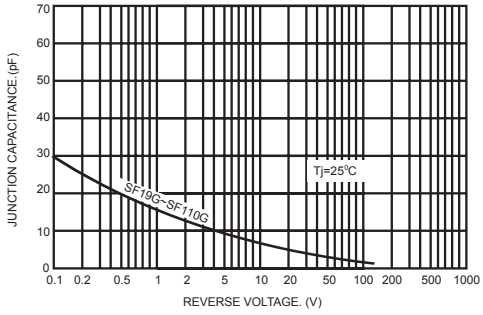


FIG.5- TYPICAL FORWARD CHARACTERISTICS

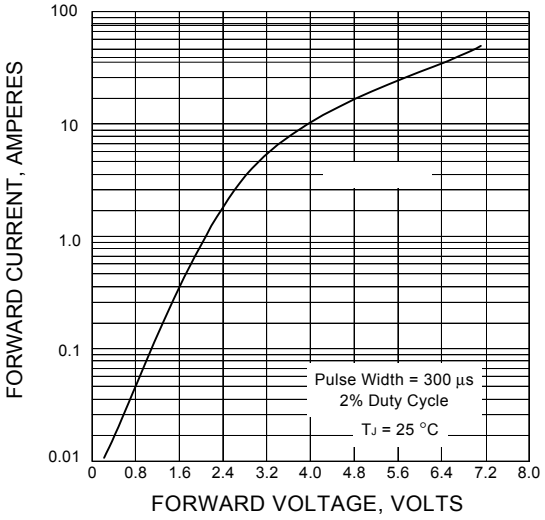
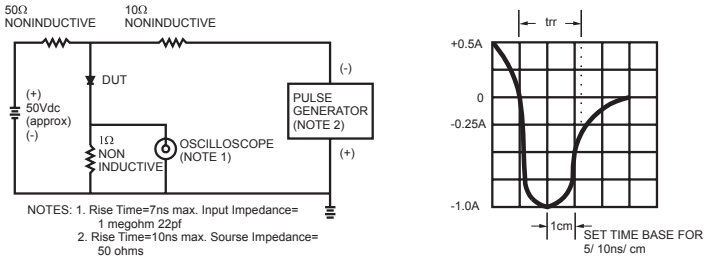


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-41	5000/AMMO	50000	42X28X31	14.00	12.00