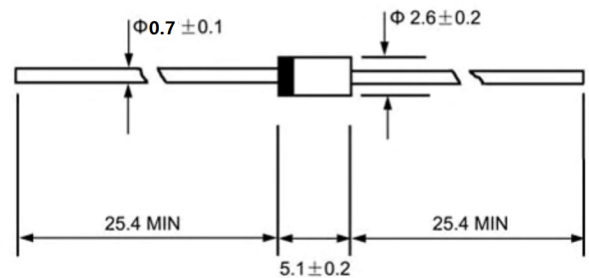




Features

- ◇ High efficiency, low VF
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ Low power loss
- ◇ Low power loss, high efficiency
- ◇ High current capability
- ◇ For use in low voltage, high frequency inverter, 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°C/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°C ambient temperature 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 @ $T_A=55^\circ C$	$I_{F(AV)}$	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 @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	IR	5.0	100	μA
Maximum Reverse Recovery Time (Note1)	T_{rr}	35		nS
Typical junction capacitance: $V_R=5.0V, f=1MHz$	CJ	10		pF
Operating temperature range	T_J	-65 to +150		$^\circ C$
Storage temperature range	T_{STG}	-65 to +150		$^\circ C$

- Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$
 2. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.
 3. Mount on Cu-Pad Size 5mm x 5mm on PCB.



RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM AVERAGE FORWARD CURRENT DERATING

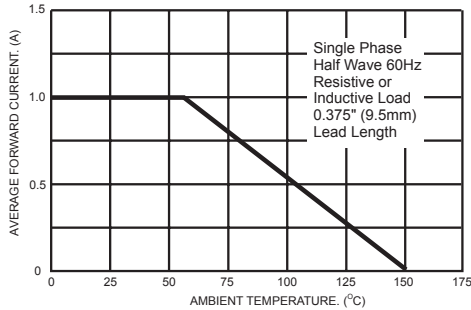


FIG.2- TYPICAL REVERSE CHARACTERISTICS

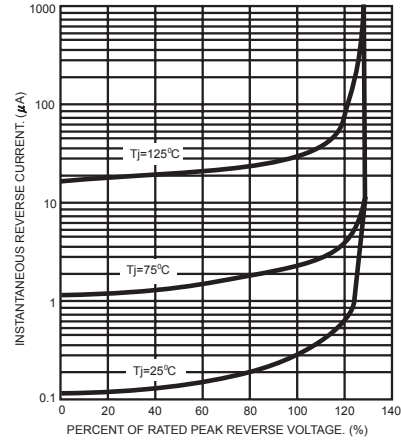


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

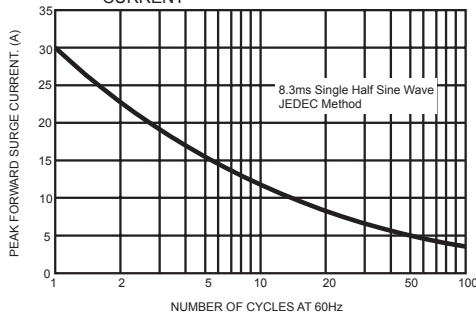


FIG.5- TYPICAL FORWARD CHARACTERISTICS

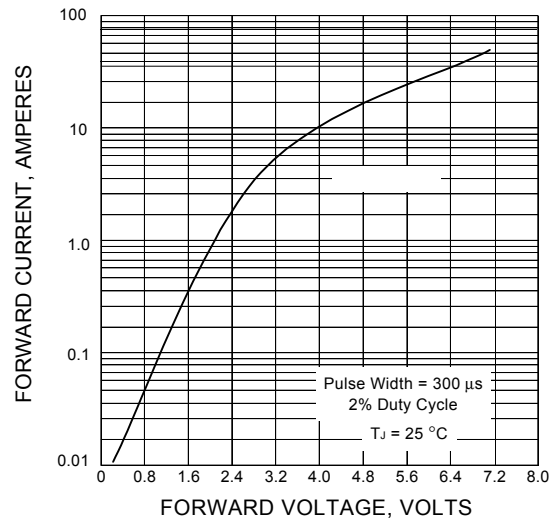


FIG.4- TYPICAL JUNCTION CAPACITANCE

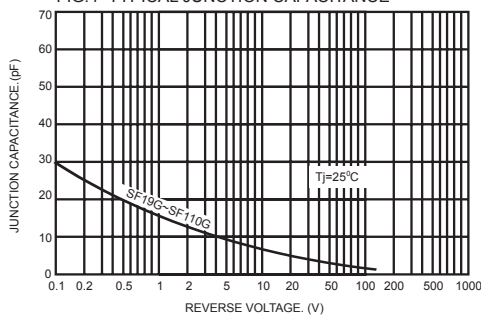
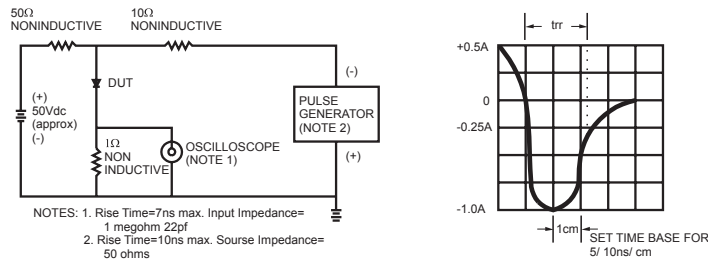


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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