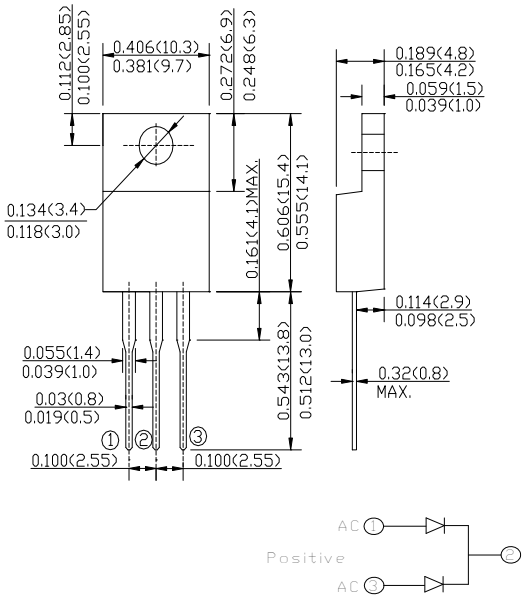
Central Plate
Electronics Co.,Ltd.

GLASS PASSIVA ATED SUPER FAST RECTIFIER

SF1605CT THRU SF1660CT 50 to 600 V 16.0 A

TO-220AB



Dimensions in inches and (millimeters)

FEATURES

- Superfast switching time for high efficiency
- High surge capacity.
- Low reverse leakage current

MECHANICAL DATA

- Case: Molded plastic, TO-220AB
- Epoxy: UL 94V-O rate flame retardant
- Terminals: Leads solderable per MIL-STD-202
- method 208 guaranteed
- Polarity: As marked
- Mounting position: Any
- Weight: 0.08ounce, 2.24gram

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.Single phase, half wave, 60HZ, resistive or inductive load.For capacitive load, derate current by 20%.

	Symbols	SF1605CT SF 1605CTG	SF1610CT SF 610CTG	SF1620CT SF1 620CTG	SF1640CT SF 1640CTG	SF1660CT SF 1660CTG	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current at TC=100℃	$I_{(AV)}$	16.0					Amp
Peak Forward Surge Current,8.3ms single half-sine-wavesuperimposed on rated load (JEDEC method)	I_{FSM}	125					Amp
Maximum Forward Voltage at 8.0A and TA=25℃	V_F	0.975			1.3	1.7	Volts
Maximum Reverse Current at TA=25℃ at Rated DC Blocking Voltage TA=125℃	I_R	10.0 400					uAmp
Typical Junction Capacitance (Note 2)	C_J	80			60		pF
Maximum Reverse Recovery Time (Note 1	T_{RR}	35					nS
Typical Thermal Resistance (Note 3)	$R_{\theta}JC$	1.5					℃/W
Operating and Storage Temperature Range	T_J，T_{stg}	-55 to +150					℃

NOTES:

1. Measured at 1 MHZ and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions：I_F=0.5A，I_R=1A，I_{RR}=0.25A.
3. Mounted on Heatsink Size of 3” x 5” x 0.25” Al-Plate.

RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

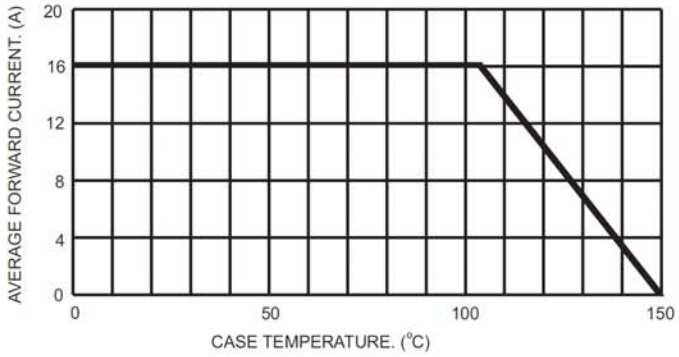


FIG.2- TYPICAL REVERSE CHARACTERISTICS

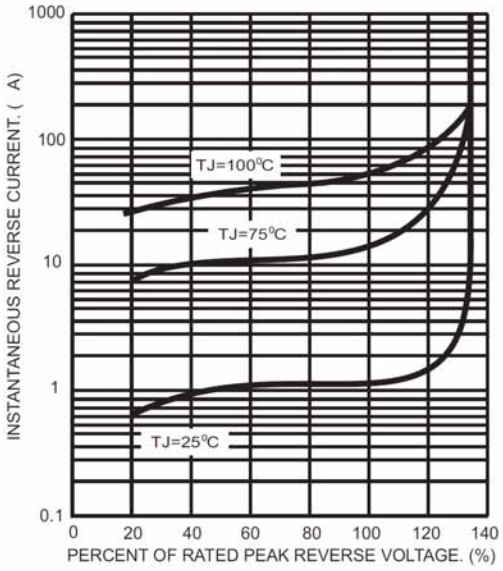


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

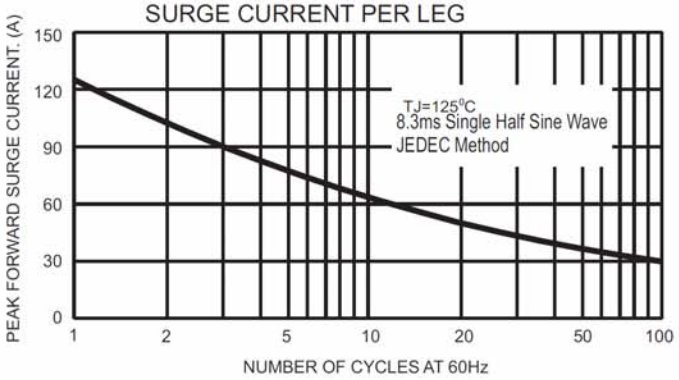


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER LEG

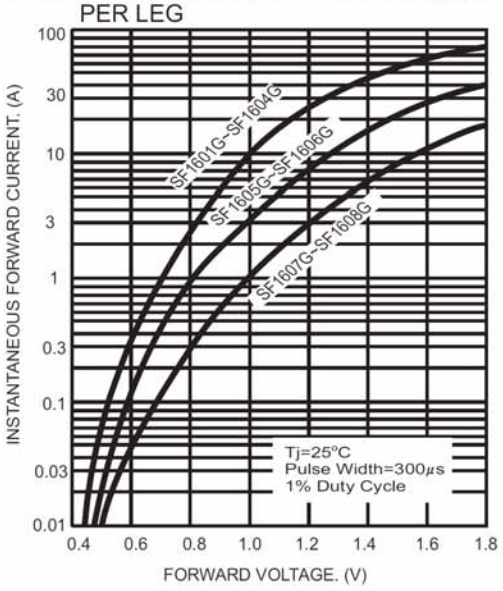


FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG

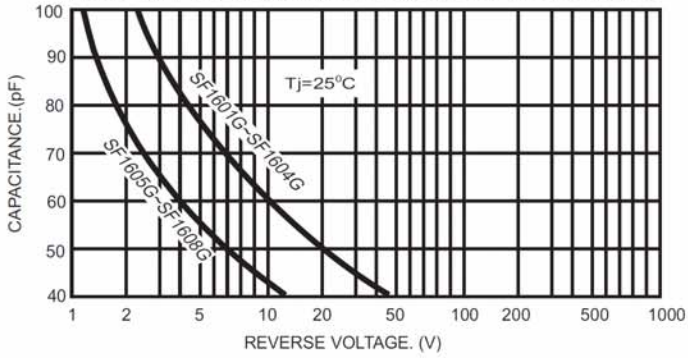


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM