

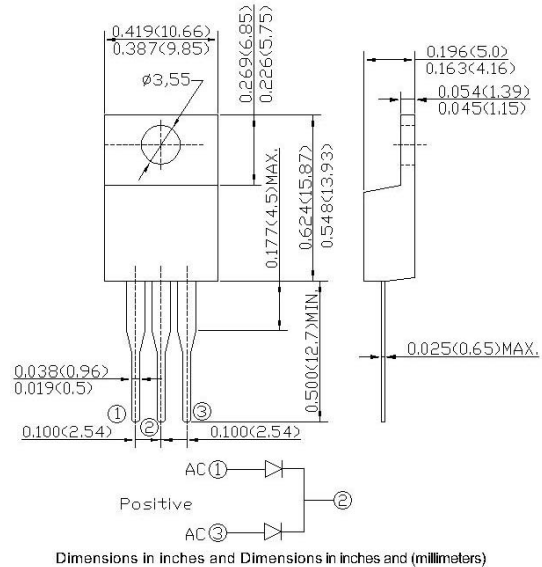
TO-220AB

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

	Symbols	SF805CT	SF810CT	SF820CT	SF840CT	SF860CT	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°C	$I_{(AV)}$	8.0					Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100					Amp
Maximum Forward Voltage at 4.0A and TA=25°C	V_F	1.3					Volts
Maximum Reverse Current at TA=25°C at Rated DC Blocking Voltage TA=125°C	I_R	10.0					uAmp
Typical Junction Capacitance (Note 1)	C_J	80			60		pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	35			50		nS
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2.2					°C/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150					°C

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Reverse Recovery Test Conditions: $I_F = .5A$, $I_R = 1A$, $IRR = .25A$.
- 3- Thermal Resistance from Junction to Case Mounted on Heatsink.



Central Plate Electronics Co., Ltd.

GLASS PASSIVATED SUPER FAST RECTIFIER SF805 THRU SF860 50 to 600 VOLTS 8.0 AMPERE

RATINGS AND CHARACTERISTIC CURVES

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

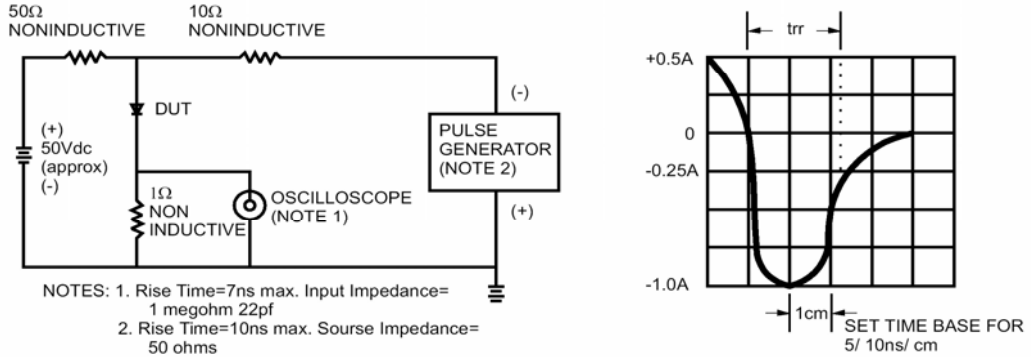


FIG.3- TYPICAL REVERSE CHARACTERISTICS

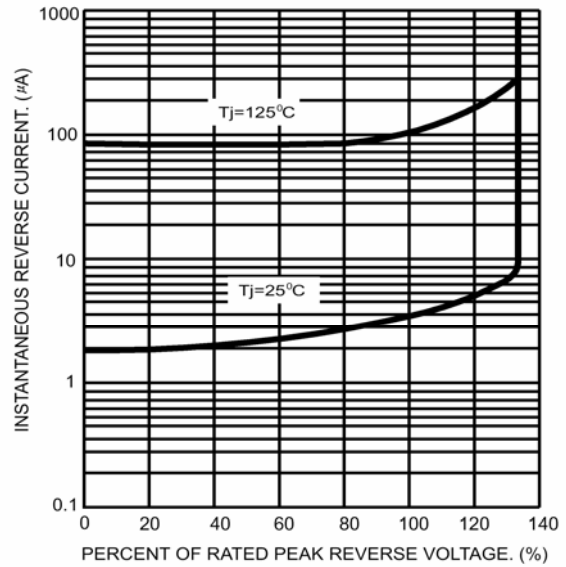


FIG.5- TYPICAL JUNCTION CAPACITANCE

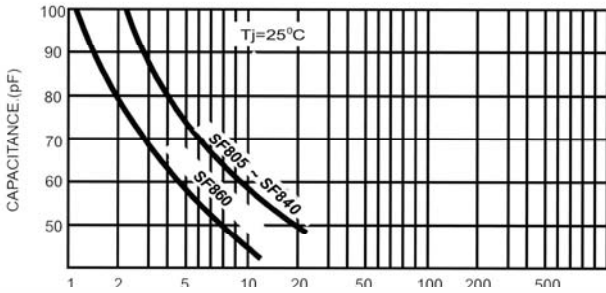


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

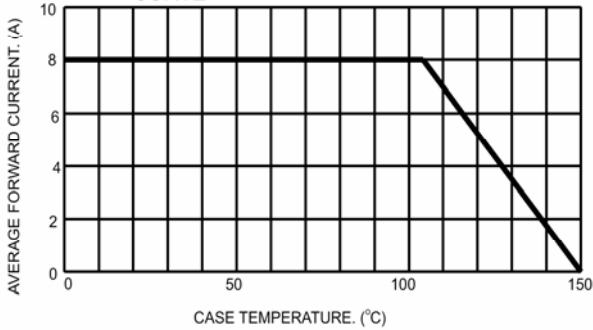


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

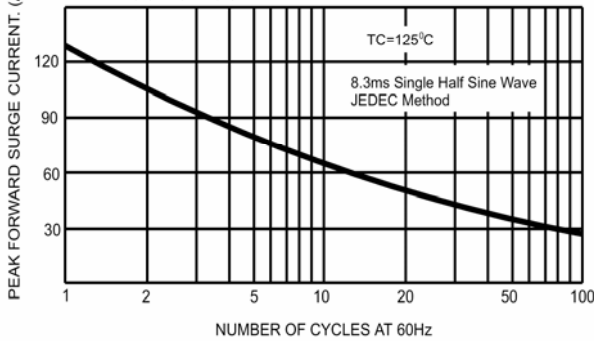


FIG.6- TYPICAL FORWARD CHARACTERISTICS

