

# SFF8005CT **THRU** SFF806CT

### SUPER FAST GLASS PASSIVATED RECTIFIERS

#### **FEATURES:**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideally suited for freewheeling diode power factor correction applications
- Excellent high temperature switching
- Optimized to reduce switching losses
- High temperature soldering guaranteed:  $250^{\circ}$ C/10 second,0.25"(6.35mm)from case

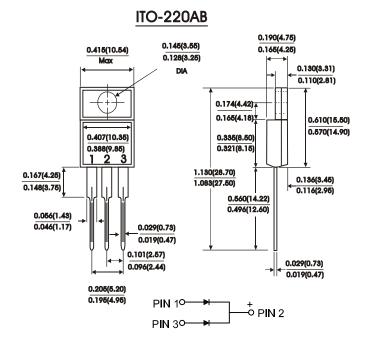
#### MECHANICAL DATA

Case: JEDEC ITO-220AB molded plastic Terminals: Leads solderable per MIL-STD-750

Method 2026 Position: As marked

Mouncting Position: Any

Mouncting Torquce: 5 in - lbs.max Weight: 0.08 ounce, 2.24 grams



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Characteristic	Symbol	SFF 8005CT	SFF 801CT	SFF 802CT	SFF 803CT	SFF 804CT	SFF 806CT	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	300	400	600	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	210	280	420	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	300	400	600	Volts
Maximum average forward rectified current at $Tc=100^{\circ}C$	I <sub>(AV)</sub>	8.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I <sub>FSM</sub>	100						Amps
Maximum instantaneous forward voltage (Per leg) $IF=4.0A$	V <sub>F</sub>	1.0 1.30 1.70				Volts		
Maximum DC reverse current (Per leg) $T_{C}=25^{\circ}\text{C}$ at rated DC blocking voltage $T_{C}=125^{\circ}\text{C}$	IR	10.0 500.0						μ Α
Typical reverse recovery time(NOTE 1)(Per leg)	T <sub>RR</sub>	35						nS
Typical junction capacition (NOTE 2)(Per leg)	СЈ	50						$P_{F}$
Operating temperature range	T <sub>J</sub>	-55to+150						$^{\circ}\mathbb{C}$
Storage temperature range	T <sub>Stg</sub>	-55to+150						$^{\circ}\!\mathbb{C}$

(1) Reverse Recovery Test CONDITION:  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$ 

(2) Measured at 1 MHZ and reverse Voltage of 4.0V

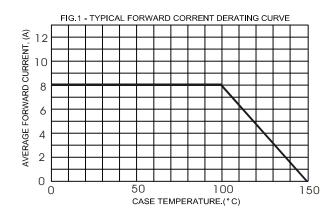
(3)Marking : <u>SFF8005CT</u> = <u>SFF8005</u> (Without Marking "CT")

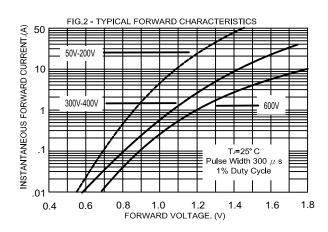
Marking

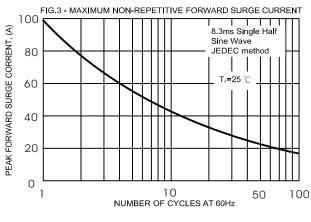


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### RATINGS AND CHARACTERISTIC CURVES







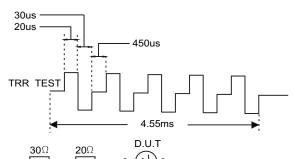
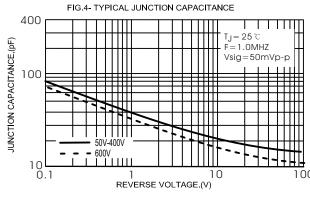
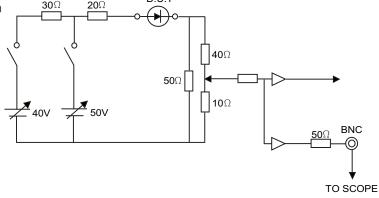
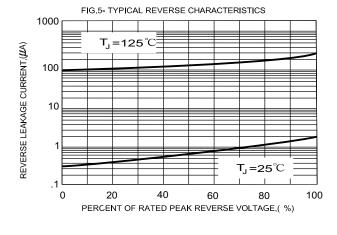
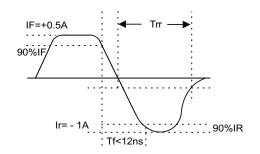


Figure 6 GR1 Test Circuit











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