SFF10005 THRU SFF1006

## SUPER FAST GLASS PASSIVATED RECTIFIERS

## **FEATURES:**

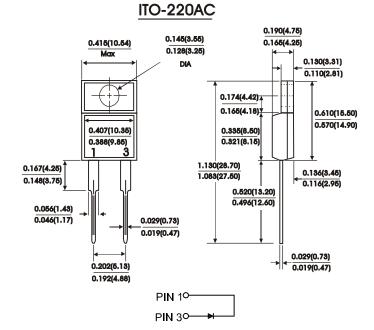
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideally suited for freewheeling diode power factor correction applications
- Excellent high temperature switching
- Optimized to reduce switching losses
- High temperature soldering guaranteed: 250°C/10 second,0.25"(6.35mm)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

# MECHANICAL DATA

Case: JEDEC ITO-220AC 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 10005	SFF 1001	SFF 1002	SFF 1003	SFF 1004	SFF 1006	Units
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	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 <sub>DC</sub>	50	100	200	300	400	600	Volts
Maximum average forward rectified current at $Tc=100^{\circ}C$	I <sub>(AV)</sub>	10.0						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=10.0A	V <sub>F</sub>	1.0 1.30 1.70			1.70	Volts		
$\begin{array}{ll} \mbox{Maximum DC reverse current} & \mbox{Tc} = 25 \ ^{\circ}\!\! \text{C} \\ \mbox{at rated DC blocking voltage (Per leg)} & \mbox{Tc} = 125 \ ^{\circ}\!\! \text{C} \end{array}$	I <sub>R</sub>	10.0 500.0						μΑ
Typical reverse recovery time(NOTE 1)(Per leg)	T <sub>RR</sub>	35						nS
Typical junction capacition (NOTE 2)(Per leg)	CJ	65						$P_{F}$
Operating temperature range	TJ	-55to+150						°C
Storage temperature range	T <sub>Stg</sub>	-55to+150						$^{\circ}\mathbb{C}$

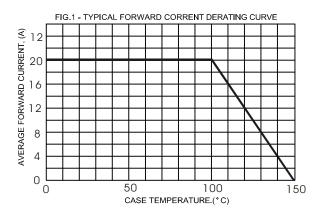
#### NOTES

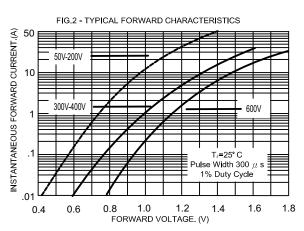
(1) Reverse Recovery Test CONDITION :  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$ 

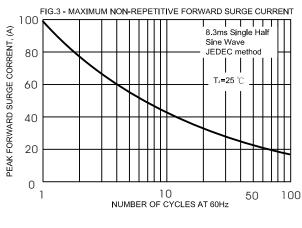
(2)Measured at 1 MHZ and reverse Voltage of 4.0V

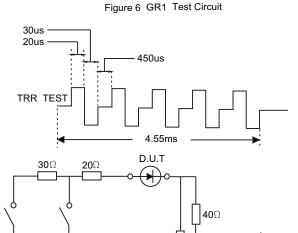
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# RATINGS AND CHARACTERISTIC CURVES



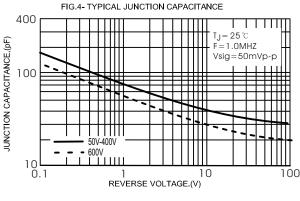


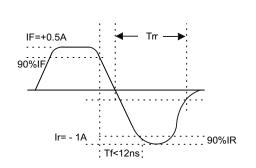


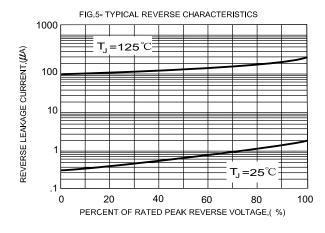


 $50\Omega$ 

10Ω







BNC

TO SCOPE



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