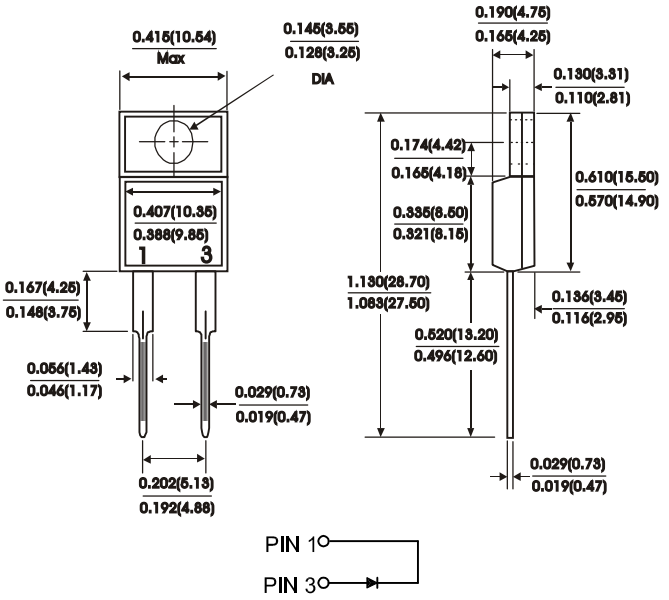
DACO SEMICONDUCTOR CO., LTD.

SFF8005 THRU SFF806

SUPER FAST GLASS PASSIVATED RECTIFIERS

ITO-220AC



Dimensions in inches and (millimeters)

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High reliability
- Low forward voltage drop
- High surge current capability
- High temperature soldering guaranteed : 250℃ /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, 2.24grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 ℃ 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 8005	SFF 801	SFF 802	SFF 803	SFF 804	SFF 806	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	600	Volts
Maximum RMS voltage	V_{RMS}	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℃	$I_{(AV)}$	8.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I_{FSM}	125						Amps
Maximum instantaneous forward voltage (Per leg) IF=8.0A	V_F	1.0			1.30		1.70	Volts
Maximum DC reverse current (Per leg) at rated DC blocking voltage Tc=25 ℃ / Tc=125℃	I_R	10.0 / 500.0						μA
Typical reverse recovery time(Per leg)(NOTE 1)	T_{RR}	35						nS
Typical junction capacition (Per leg)(NOTE 2)	C_J	80					60	P_F
Operating temperature range	T_J	-55to+150						℃
Storage temperature range	T_{Stg}	-55to+150						℃

NOTES:
(1)Reverse Recovery Test CONDITION : I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
(2)Measured at 1MHZ and reverse Voltage of 4.0V

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

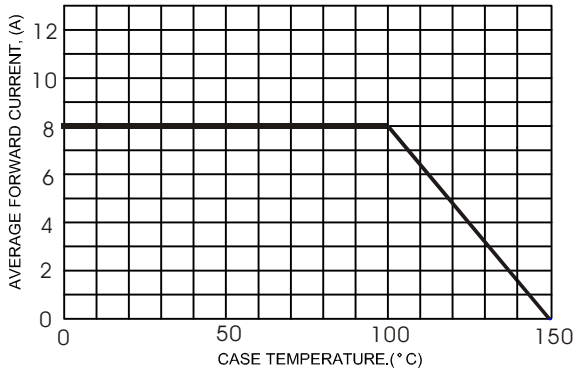


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

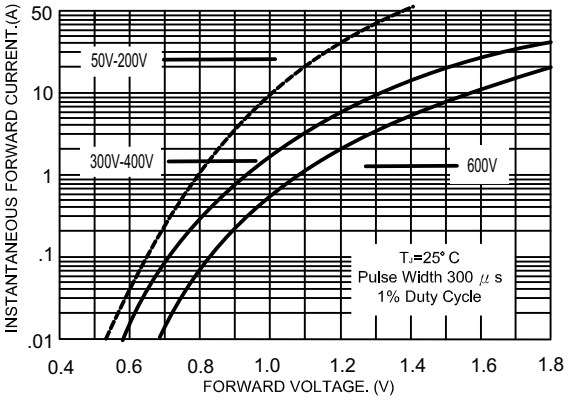


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

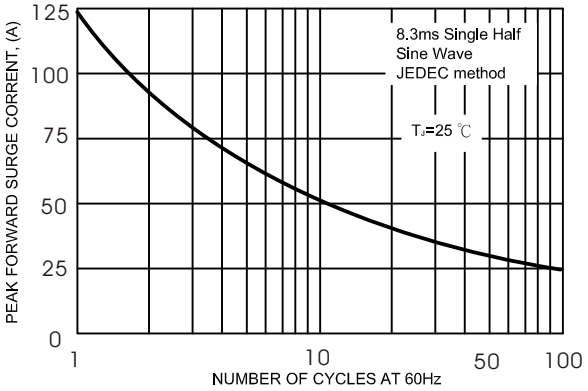


Figure 6 GR1 Test Circuit

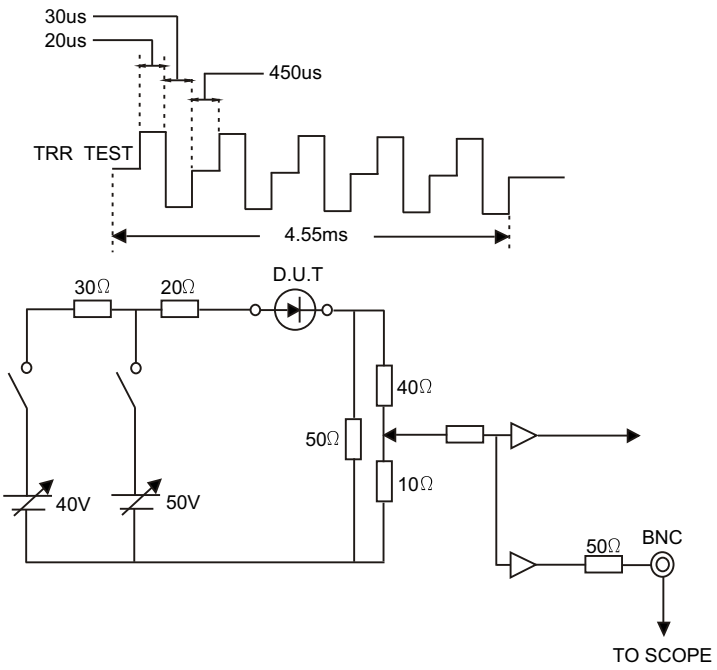
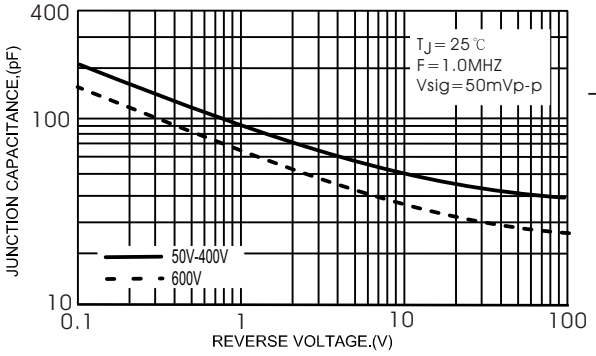


FIG.4- TYPICAL JUNCTION CAPACITANCE



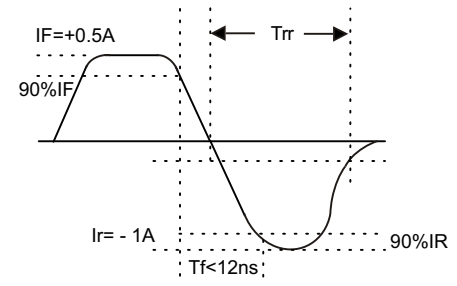
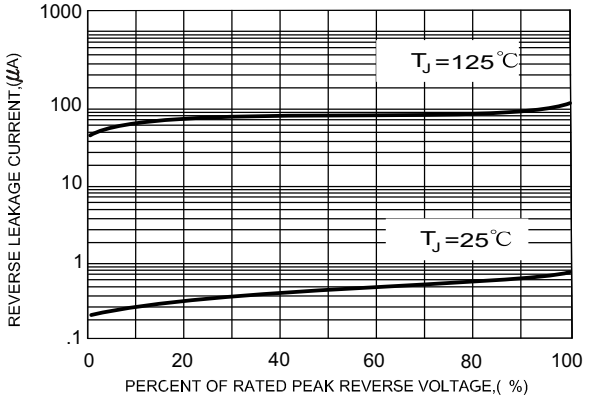


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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