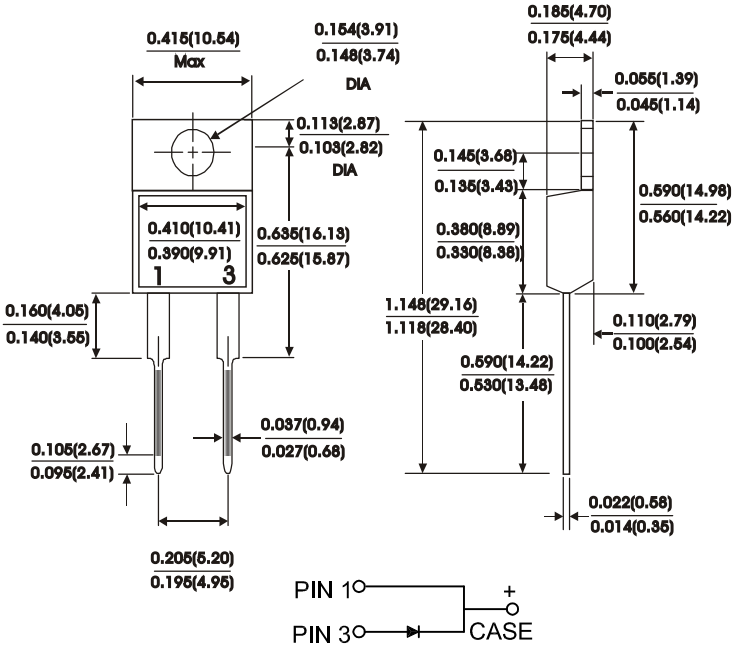
DACO SEMICONDUCTOR CO., LTD.

SF8005 THRU SF806

SUPER FAST GLASS PASSIVATED RECTIFIERS

TO-220 AC



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 TO-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	SF 8005	SF 801	SF 802	SF 803	SF 804	SF 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)	I_{FSM}	125						Amps
Maximum instantaneous forward voltage IF=8.0A	V_F	1.0			1.30		1.70	Volts
Maximum DC reverse current at rated DC blocking voltage Tc=25 ℃ / Tc=125℃	I_R	10.0 / 500.0						μA
Typical reverse recovery time(NOTE 1)	T_{RR}	35						nS
Typical junction capacition(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

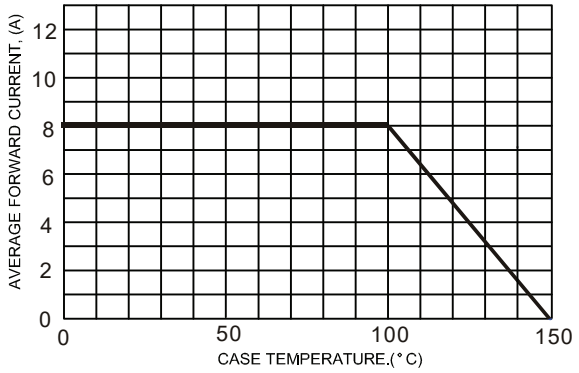


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

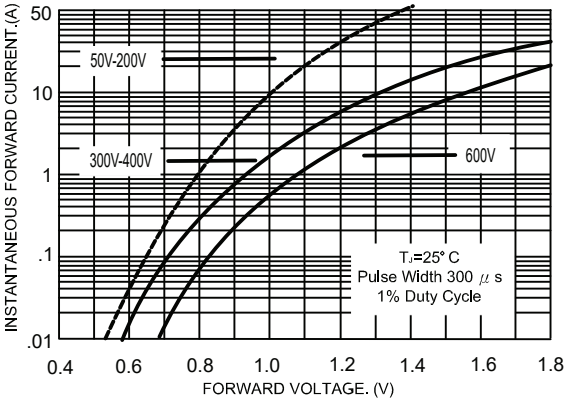


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

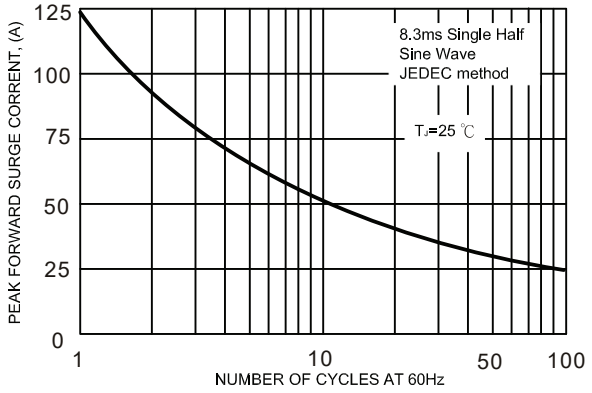


Figure 6 GR1 Test Circuit

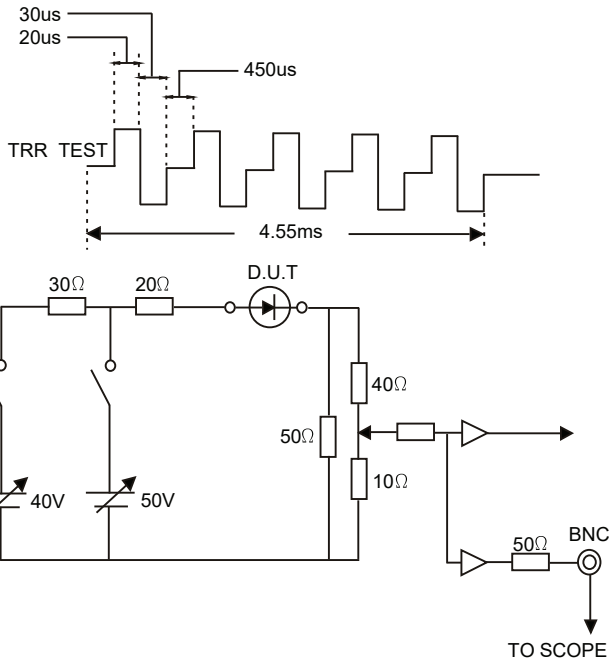


FIG.4- TYPICAL JUNCTION CAPACITANCE

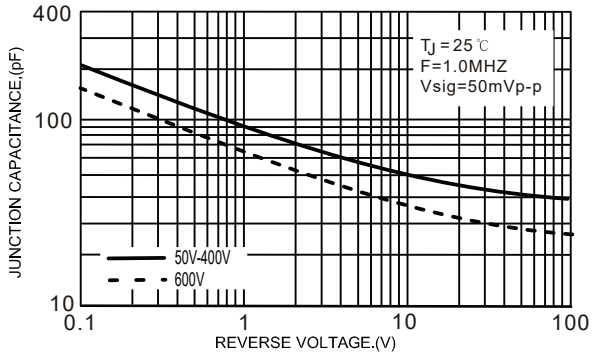
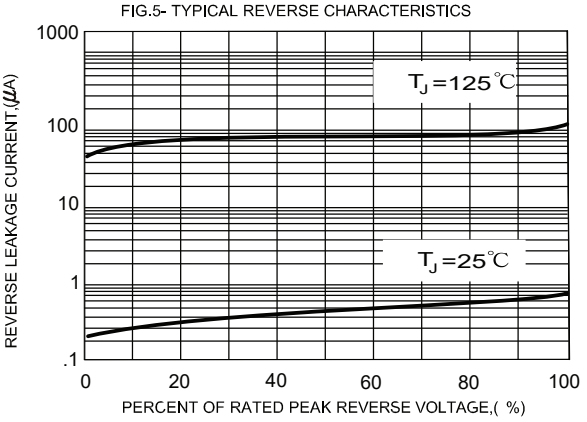
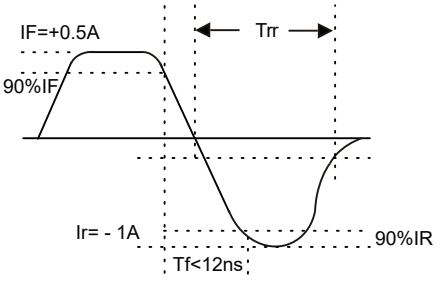


FIG.5- TYPICAL REVERSE CHARACTERISTICS





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