

Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638

Phone: (562) 404-4474 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SFT2907A2

Screening^{2/} = Commercial
TX= TX Level
TXV= TXV Level
S= S Level

Package GW= Gullwing

SFT2907A2

Series

Dual Microminiature Package

600 mA 60 Volts

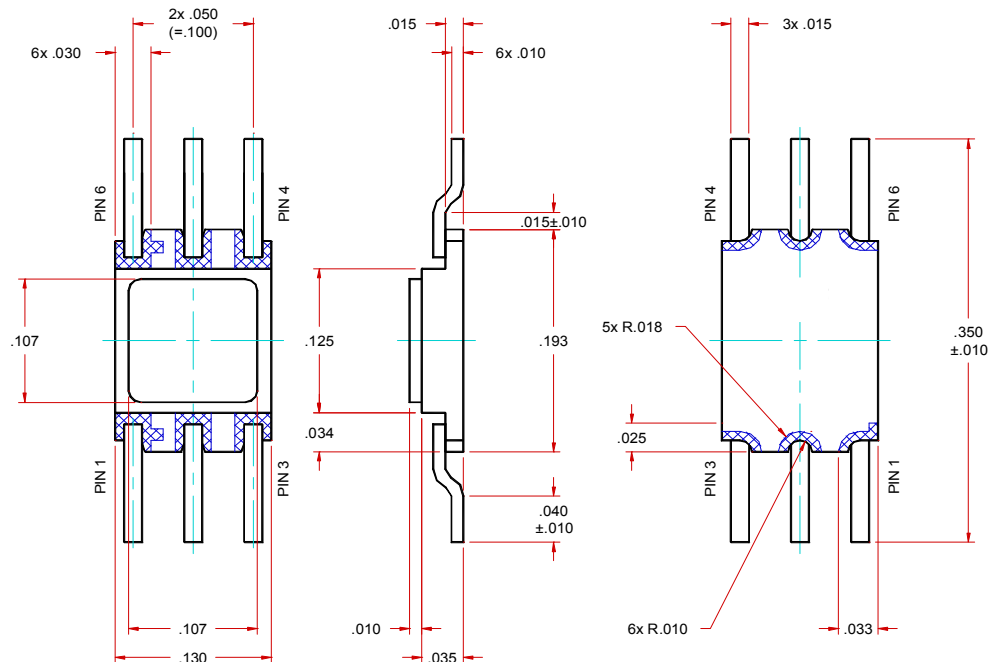
Dual PNP Transistor

Features:

- High Speed Switching Transistor
- Multiple Devices Reduce Board Space
- High Power Dissipation: Up to 600 mW
- Replacement for 2N2907AU
- TX, TXV, S-Level Screening Available ^{2/}
- NPN Complimentary Parts Available (SFT2222A2)

Maximum Ratings	Symbol	Value	Units
Collector – Emitter Voltage	V_{CEO}	60	Volts
Collector – Base Voltage	V_{CBO}	60	Volts
Emitter – Base Voltage	V_{EBO}	5	Volts
Continuous Collector Current	I_C	600	mA
Power Dissipation @ $T_A = 25^\circ C$	P_D	500 660	mW
Operating & Storage Temperature	$T_{OP} \& T_{stg}$	-65 to +200	$^\circ C$
Maximum Thermal Resistance (Junction to PCB)	$R_{\theta J-PCB}$	265	$^\circ C/W$

Gullwing (GW)



Tolerances:

 $\text{.xx} \pm .01$
$$.xxx \pm .005$$

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: TR0031F

DOC



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SFT2907A2 Series

Electrical Characteristic ^{4/}	Symbol	Min	Max	Units
Collector – Emitter Sustaining Voltage $I_C = 10 \text{ mA}$	BV_{CEO}	60	—	Volts
Collector Cutoff Current $V_{CE} = 50 \text{ V}$	I_{CES}	—	50	nA
Collector Cutoff Current $V_{CB} = 50 \text{ V}$ $V_{CB} = 60 \text{ V}$ $V_{CB} = 50 \text{ V}, T_A = 150^\circ\text{C}$	I_{CBO}	—	0.01 10 10	μA
Emitter Cutoff Current $V_{EB} = 4.0 \text{ V}$ $V_{EB} = 5.0 \text{ V}$	I_{EBO}	—	0.05 10	μA
DC Forward Current Transfer Ratio ^{5/} $V_{CE} = 10 \text{ V}, I_C = 0.1 \text{ mA}$ $V_{CE} = 10 \text{ V}, I_C = 1.0 \text{ mA}$ $V_{CE} = 10 \text{ V}, I_C = 10 \text{ mA}$ $V_{CE} = 10 \text{ V}, I_C = 150 \text{ mA}$ $V_{CE} = 10 \text{ V}, I_C = 500 \text{ mA}$ $V_{CE} = 10 \text{ V}, I_C = 10 \text{ mA}, T_A = -55^\circ\text{C}$	H_{FE}	75 100 100 100 50 50	— 450 — 300 — —	
Small-signal Forward Current Transfer Ratio $V_{CE} = 10 \text{ V}, I_C = 1.0 \text{ mA}, f = 1 \text{ kHz}$	h_{fe}	100	—	
Collector – Emitter Saturation Voltage ^{5/} $I_C = 150 \text{ mA}, I_B = 15 \text{ mA}$ $I_C = 500 \text{ mA}, I_B = 50 \text{ mA}$	$V_{CE(Sat)}$	— —	0.4 1.6	Volts
Base – Emitter Saturation Voltage ^{5/} $I_C = 150 \text{ mA}, I_B = 15 \text{ mA}$ $I_C = 500 \text{ mA}, I_B = 50 \text{ mA}$	$V_{BE(Sat)}$	0.6 —	1.3 2.6	Volts
Frequency Transition $V_{CE} = 20 \text{ V}, I_C = 20 \text{ mA}, f = 100 \text{ MHz}$	f_T	200	—	MHz
Switching Times $V_{CC} = 30 \text{ V}, I_C = 150 \text{ mA}, I_{B1} = I_{B2} = 15 \text{ mA}$ $V_{CC} = 6 \text{ V}, I_C = 150 \text{ mA}, I_{B1} = I_{B2} = 15 \text{ mA}$	t_{on} t_{off}	— —	45 300	ns
Output Capacitance $V_{CE} = 10 \text{ V}, f = 1 \text{ MHz}$	C_{ob}	—	8.0	pF
Input Capacitance $V_{CE} = 2.0 \text{ V}, f = 1 \text{ MHz}$	C_{ib}	—	30	pF

NOTES:

1/ For Ordering Information, Price, and Availability Contact Factory.

2/ Screening based on MIL-PRF-19500. Screening flows available on request.

3/ For Package Outlines Contact Factory.

4/ Unless Otherwise Specified, All Electrical Characteristics @ 25°C.

5/ Pulse Test: Pulse Width= 300μsec, Duty Cycle= 2%

Available Part Numbers:

SFT2907A2GW

PIN ASSIGNMENT

Package	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6
GW	Collector1	Base1	Emitter1	Collector2	Base2	Emitter2

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: TR0031F

DOC