



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
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SFT2907A2
Series

Dual Microminiature Package
600 mA 60 Volts
Dual PNP Transistor

DESIGNER'S DATA SHEET

Part Number / Ordering Information^{1/}

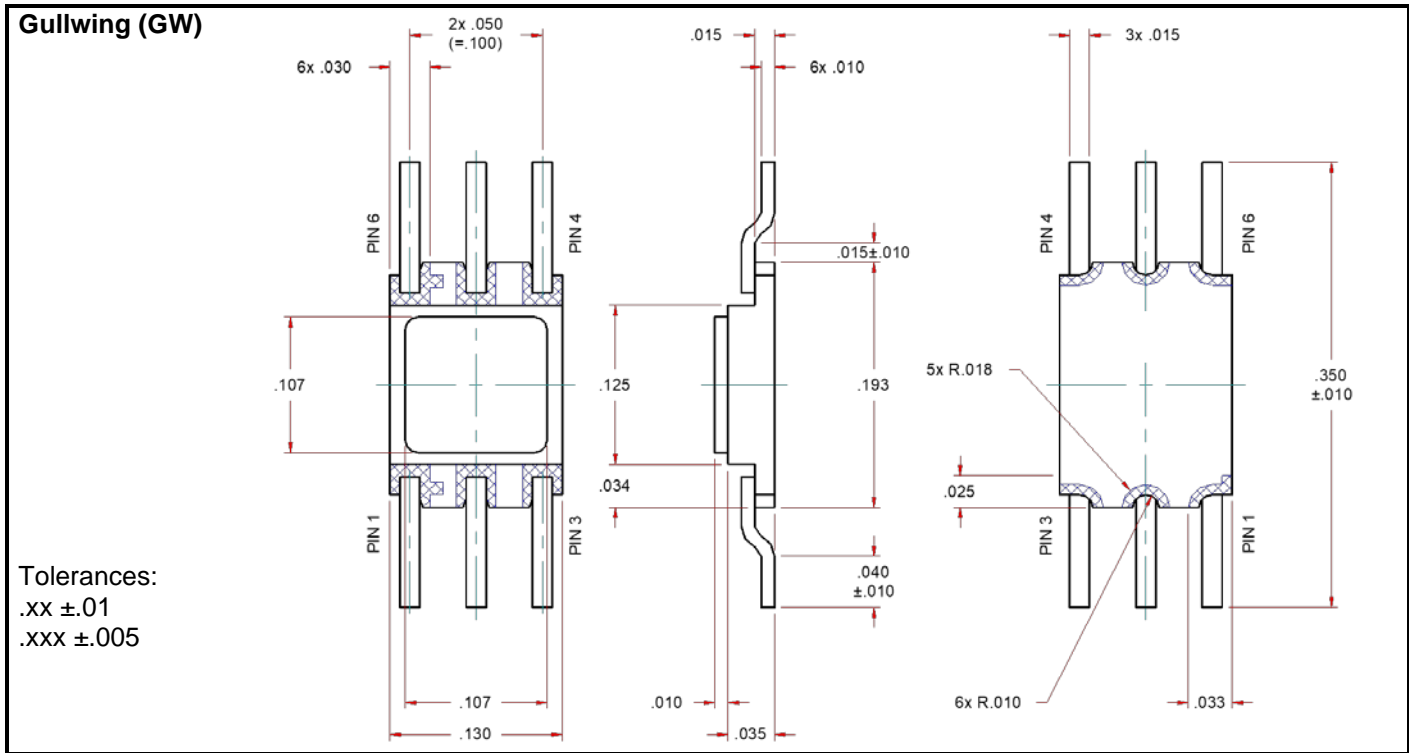
SFT2907A2

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

└ **Package** GW= Gullwing

- 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	Unit
Collector – Emitter Voltage	V _{CEO}	60	V
Collector – Base Voltage	V _{CB0}	60	V
Emitter – Base Voltage	V _{EBO}	5	V
Continuous Collector Current	I _c	600	mA
Power Dissipation @ T _A = 25°C	P _D	500	mW
Per Device Total		660	
Operating & Storage Temperature	T _{OP} & T _{stg}	-65 to +200	°C
Maximum Thermal Resistance (Junction to PCB)	R _{θJ-PCB}	245	°C/W





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Electrical Characteristic ^{4/}	Symbol	Min	Max	Unit
Collector – Emitter Sustaining Voltage $I_C = 10 \text{ mA}$	BV_{CEO}	60	—	V
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	μA
		—	10	
		—	10	
Emitter Cutoff Current $V_{EB} = 4.0 \text{ V}$ $V_{EB} = 5.0 \text{ V}$	I_{EBO}	—	0.05	μA
		—	10	
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	450	
		100	—	
		100	300	
		50	—	
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	V
		—	1.6	
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	V
		—	2.6	
Frequency Transition $V_{CE} = 20 \text{ V}, I_C = 20 \text{ mA}, f = 100 \text{ MHz}$	f_T	200	—	MHz
Switching Times $V_{CC} = 30 \text{ V}, I_C = 150 \text{ mA}, I_{B1} = I_{B2} = 15 \text{ mA}$	t_{on}	—	45	ns
	t_{off}	—	300	
Output Capacitance $V_{CB} = 10 \text{ V}, f = 1 \text{ MHz}$	C_{ob}	—	8.0	pF
Input Capacitance $V_{EB} = 2.0 \text{ V}, f = 1 \text{ MHz}$	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 = 300 μsec , 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 #: TR0031J

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