



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

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DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SFT4957A2

\square Screening ^{2/} $\underline{\quad}$ = Commercial
 TX = TX Level
 TXV = TXV Level
 S = S Level

Package: GW = Gullwing

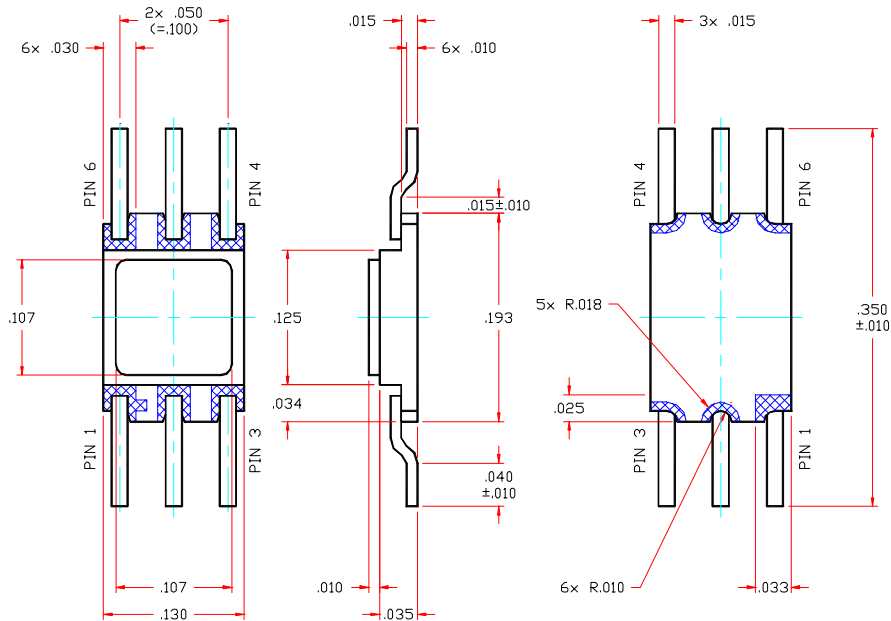
SFT4957A2 Series

**Dual Microminiature Package
30 mA 30 Volts
Dual PNP RF Transistor**

- Features:**
- RF Switching Transistor
 - Multiple Devices Reduce Board Space
 - Replacement/Enhancement for 2N4957UB
 - TX, TXV, S-Level screening available
 - NPN complimentary parts available (SFT2857A2)

Maximum Ratings	Symbol	Value	Units
Collector – Emitter Voltage	V_{CEO}	30	Volts
Collector – Base Voltage	V_{CBO}	30	Volts
Emitter – Base Voltage	V_{EBO}	3	Volts
Continues Collector Current	I_C	30	mAmps
Power Dissipation @ TC = 25°C (each device)	P_D	200	mW
Operating & Storage Temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance (Junction to PCB)	$R_{\theta JC}$	290	°C/W

Gullwing (GW)





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**SFT4957A2
Series**

Electrical Characteristic ^{4/}	Symbol	Min	Max	Units
Collector – Emitter Sustaining Voltage $I_C = 1 \text{ mA}$	BV_{CEO}	-30	—	Volts
Collector Cutoff Current $V_{cb} = -20 \text{ V}$	I_{CBO1}	—	100	nA
Collector Cutoff Current $V_{cb} = -30 \text{ V}$	I_{CBO2}	—	100	uA
Collector Cutoff Current $V_{cb} = -20 \text{ V}, T_a = 150^\circ\text{C}$	I_{CBO3}	—	100	uA
Emitter Cutoff Current $V_{eb} = -3.0 \text{ V}$	I_{EBO}	—	100	uA
DC Forward Current Transfer Ratio * $V_{CE} = -10\text{V}, I_C = 0.5 \text{ mA}$ $V_{CE} = -10\text{V}, I_C = 2.0 \text{ mA}$ $V_{CE} = -10\text{V}, I_C = 5 \text{ mA}$ $V_{CE} = -10\text{V}, I_C = 5 \text{ mA}, T_a = -55^\circ\text{C}$	H_{FE1} H_{FE2} H_{FE3} H_{FE4}	15 20 30 10	— — 165 —	
Frequency Transition (Small Signal Current Gain) @ $f = 100 \text{ MHz}$ $V_{CE} = -10\text{V}, I_C = 2.0 \text{ mA}$	h_{fe}	12	36	
CB feedback (output) Capacitance $V_{CE} = -10\text{V}, f = 1\text{MHz}$	c_{cb}	—	0.8	pF
CB time constant $V_{CE} = -10\text{V}, I_C = 2\text{mA}, f = 63.6 \text{ MHz}$	$rbCc$	1.0	16	psec
Common emitter small signal power gain $V_{CE} = -10\text{V}, I_C = 2\text{mA}, f = 450 \text{ MHz}$	G_{pe}	17	25	dB
Noise Figure $I_C = 2 \text{ mA}, V_{ce} = -10 \text{ V}, R_L = 50\Omega, f = 450 \text{ MHz}$	NF	—	3.5	dB

NOTES:

* Pulse Test: Pulse Width = 300µsec, Duty Cycle = 2%
 1/ For Ordering Information, Price, and Availability Contact Factory.

2/ Screening per MIL-PRF-19500

3/ For Package Outlines Contact Factory.

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

Available Part Numbers:
SFT4957A2GW

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 #: TR0077 A

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