



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SFT2369A2

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

Package GW = Gullwing

www.DataSheet4U.com

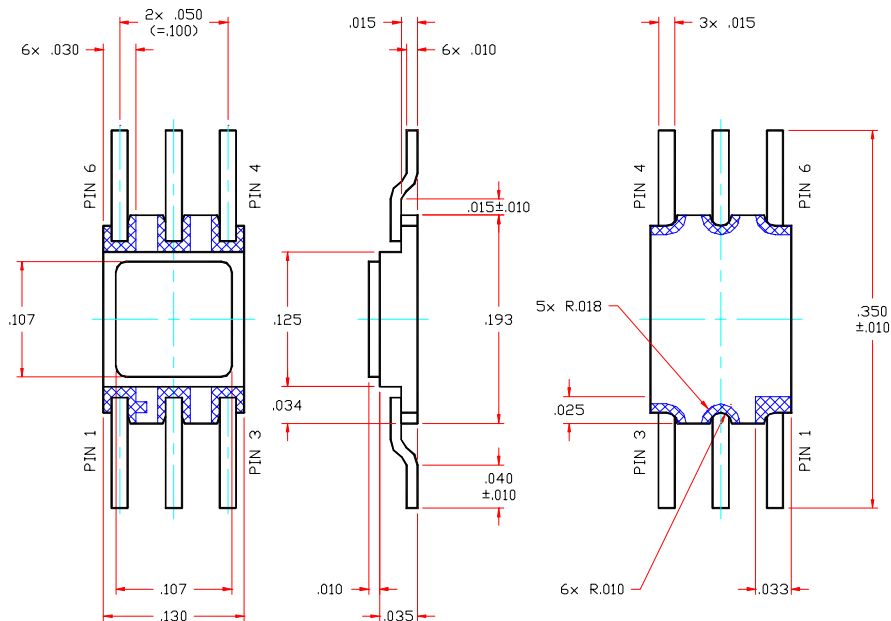
SFT2369A2 Series

**Dual Microminiature Package
100 mA 15 Volts
Dual NPN Transistor**

- Features:**
- High Speed Switching Transistor
 - Suitable in chopper, uhf and rf application
 - Multiple Devices Reduce Board Space
 - Replacement for 2N2369AU
 - TX, TXV, S-Level screening available

Maximum Ratings	Symbol	Value	Units
Collector – Emitter Voltage	V_{CEO}	15	Volts
Collector – Base Voltage	V_{CBO}	40	Volts
Emitter – Base Voltage	V_{EBO}	4.5	Volts
Continues Collector Current	I_C	100	mAmps
Power Dissipation @ $T_a = 25^\circ C$	P_D	360 500	mW
Operating & Storage Temperature	Top & Tstg	-65 to +200	$^\circ C$
Maximum Thermal Resistance (Junction to PCB)	$R_{\theta J-PCB}$	290	$^\circ C/W$

Gullwing (GW)



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

DATA SHEET #: TR0045A



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**SFT2369A2
Series**

Electrical Characteristic ^{4/}		Symbol	Min	Max	Units
Collector – Emitter Sustaining Voltage	$I_C = 10 \text{ mA}$	BV_{CEO}	15	—	Volts
Collector Cutoff Current	$V_{ce} = 20 \text{ V}$,	I_{CES}	—	400	nA
Collector Cutoff Current	$V_{cb} = 32 \text{ V}$	I_{CBO}	—	200	nA
	$V_{cb} = 40 \text{ V}$			10	μA
	$V_{cb} = 20 \text{ V}, T_a = 150 \text{ }^\circ\text{C}$			30	μA
Emitter Cutoff Current	$V_{eb} = 4.0 \text{ V}$	I_{EBO}	—	250	nA
	$V_{eb} = 4.5 \text{ V}$			10	μA
DC Forward Current Transfer Ratio *	$V_{CE} = 0.35\text{V}, I_C = 10 \text{ mA}$	H_{FE}		40	120
	$V_{CE} = 0.40\text{V}, I_C = 30 \text{ mA}$			30	120
	$V_{CE} = 1.0\text{V}, I_C = 10 \text{ mA}$			40	120
	$V_{CE} = 1.0\text{V}, I_C = 100 \text{ mA}$			20	120
	$V_{ce} = 1.0\text{V}, I_c = 10 \text{ mA}, T_a = -55 \text{ }^\circ\text{C}$			20	—
Collector – Emitter Saturation Voltage *	$I_C = 10\text{mA}, I_B = 1.0\text{mA}$	$V_{CE(Sat)}$		—	0.20
	$I_C = 30\text{mA}, I_B = 3.0\text{mA}$			—	0.25
	$I_C = 100\text{mA}, I_B = 10\text{mA}$			—	0.45
	$I_C = 10\text{mA}, I_B = 1.0\text{mA}, T_a = 125 \text{ }^\circ\text{C}$			—	0.30
Base – Emitter Saturation Voltage *	$I_C = 10\text{mA}, I_B = 1.0\text{mA}$	$V_{BE(Sat)}$		0.7	0.85
	$I_C = 30\text{mA}, I_B = 3.0\text{mA}$			—	0.9
	$I_C = 100\text{mA}, I_B = 10\text{mA}$			0.8	1.2
	$I_C = 10\text{mA}, I_B = 1.0\text{mA}, T_a = -55 \text{ }^\circ\text{C}$			—	1.02
				$I_C = 10\text{mA}, I_B = 1.0\text{mA}, T_a = 125 \text{ }^\circ\text{C}$	0.59
Frequency Transition	$V_{CE} = 10\text{V}, I_C = 10\text{mA}$	f_T	500	1000	MHz
Output Capacitance	$V_{CE} = 5\text{V}, f = 1\text{MHz}$	c_{ob}	—	4.0	pF
Input Capacitance	$V_{CE} = 0.5\text{V}, f = 1\text{MHz}$	c_{ib}	—	5.0	pF
Switch Times	Test Circuit per MIL-PRF-19500/317	t_{on}	—	12	nsec
		t_{off}	—	18	
		t_s	—	13	

NOTES:

- * Pulse Test: Pulse Width = 300 μsec , 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 $^\circ\text{C}$.

Available Part Numbers:

SFT2369A2GW

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