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

SFT2369A2 Series

Dual Microminiature Package
100 mA 15 Volts
Dual NPN Transistor

DESIGNER'S DATA SHEET

Part Number / Ordering Information [1/]

SFT2369A2

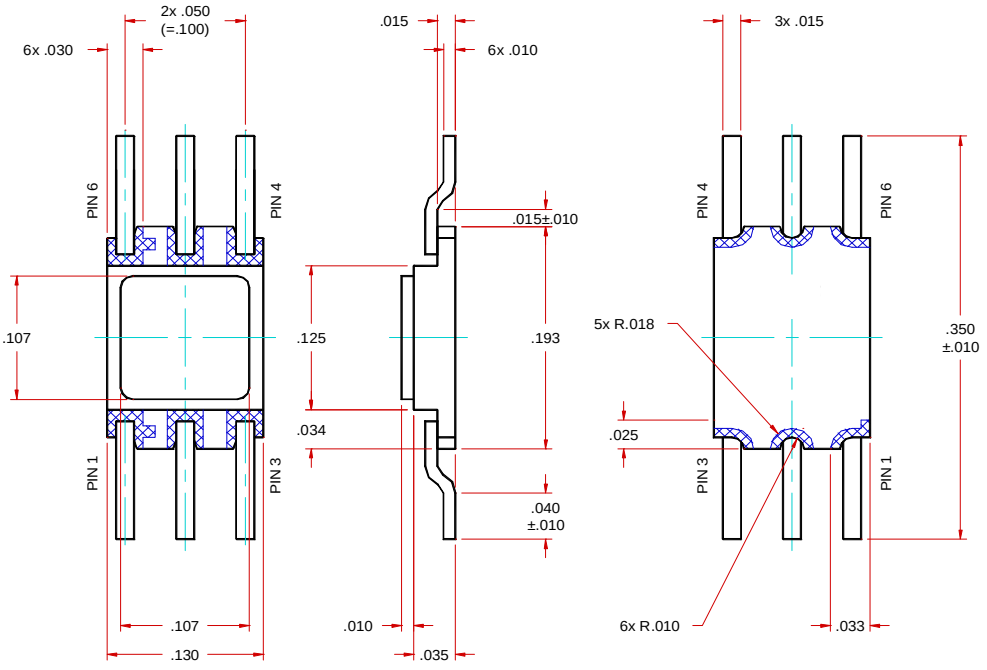
Screening [2/] __ = Commercial
TX= TX Level
TXV= TXV Level
S= S Level

Package GW= Gullwing

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 [2/]

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
Continuous Collector Current		I_C	100	mA
Power Dissipation @ T_A= 25ºC	Per Device Total	P_D	360 500	mW
Operating & Storage Temperature		T_{OP} & T_{stg}	-65 to +200	ºC
Maximum Thermal Resistance (Junction to PCB)		$R_{\theta J\text{-}PCB}$	350	ºC/W

Gullwing (GW)



Tolerances:
.xx ±.01
.xxx ±.005

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Electrical Characteristic [4/]		Symbol	Min	Max	Units
Collector – Emitter Sustaining Voltage	I_C= 10 mA	BV_{CEO}	15	—	Volts
Collector Cutoff Current	V_{CE}= 20 V, V_{BE}= 0 V	I_{CEX}	—	0.4	µA
	V_{CE}= 10 V, V_{BE}= 0.25 V, T_A= 125ºC			30	
Collector Cutoff Current	V_{CB}= 32 V	I_{CBO}	—	0.2	µA
	V_{CB}= 40 V			10	
	V_{CB}= 20 V, T_A= 150ºC			30	
Emitter Cutoff Current	V_{EB}= 4.0 V	I_{EBO}	—	0.25	µA
	V_{EB}= 4.5 V			10	
DC Forward Current Transfer Ratio [5/]	V_{CE}= 0.35 V, I_C= 10 mA	H_{FE}	40	120	
	V_{CE}= 0.40 V, I_C= 30 mA		30	120	
	V_{CE}= 1.0 V, I_C= 10 mA		40	120	
	V_{CE}= 1.0 V, I_C= 100 mA		20	120	
	V_{CE}= 1.0 V, I_C= 10 mA, T_A= -55ºC		20	—	
Collector – Emitter Saturation Voltage [5/]	I_C= 10 mA, I_B= 1.0 mA	$V_{CE(Sat)}$	—	0.20	Volts
	I_C= 30 mA, I_B= 3.0 mA		—	0.25	
	I_C= 100 mA, I_B= 10 mA		—	0.45	
	I_C= 10 mA, I_B= 1.0 mA, T_A= 125ºC		—	0.30	
Base – Emitter Saturation Voltage [5/]	I_C= 10 mA, I_B= 1.0 mA	$V_{BE(Sat)}$	0.7	0.85	Volts
	I_C= 30 mA, I_B= 3.0 mA		—	0.9	
	I_C= 100 mA, I_B= 10 mA		0.8	1.2	
	I_C= 10 mA, I_B= 1.0 mA, T_A= -55ºC		—	1.02	
	I_C= 10 mA, I_B= 1.0 mA, T_A= 125ºC		0.59	—	
Frequency Transition	V_{CE}= 20V, I_C= 20mA, f= 100 MHz	f_T	500	1000	MHz
Output Capacitance	V_{CE}= 5 V, f= 1 MHz	c_{ob}	—	4.0	pF
Input Capacitance	V_{CE}= 0.5 V, f= 1 MHz	c_{ib}	—	5.0	pF
Switching Times	Test Circuit per MIL-PRF-19500/317	t_{on}	—	12	ns
		t_{off}	—	18	
		t_s		13	

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 @ 25ºC.

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

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