



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

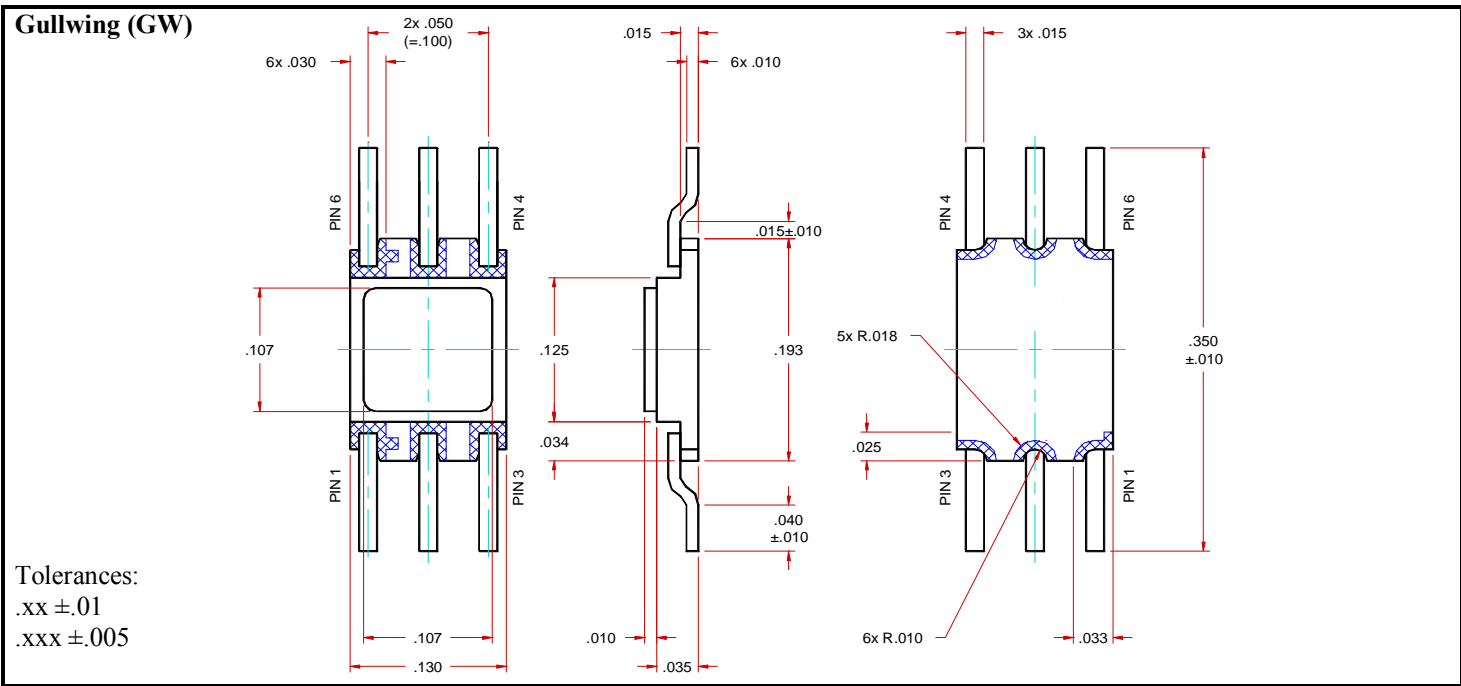
Part Number / Ordering Information^{1/}

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 = 25°C | P _D | Per Device | 360 |
| | | Total | 500 |
| Operating & Storage Temperature | T _{OP} & T _{stg} | -65 to +200 | °C |
| Maximum Thermal Resistance (Junction to PCB) | R _{θJ-PCB} | 350 | °C/W |





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**

| 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 V _{CE} = 10 V, V _{BE} = 0.25 V, T _A = 125°C | I _{CEX} | — | 0.4 30 | μA |
| Collector Cutoff Current V _{CB} = 32 V V _{CB} = 40 V V _{CB} = 20 V, T _A = 150°C | I _{CBO} | — | 0.2 10 30 | μA |
| Emitter Cutoff Current V _{EB} = 4.0 V V _{EB} = 4.5 V | I _{EBO} | — | 0.25 10 | μA |
| DC Forward Current Transfer Ratio ^{5/} V _{CE} = 0.35 V, I _C = 10 mA V _{CE} = 0.40 V, I _C = 30 mA V _{CE} = 1.0 V, I _C = 10 mA V _{CE} = 1.0 V, I _C = 100 mA V _{CE} = 1.0 V, I _C = 10 mA, T _A = -55°C | H _{FE} | 40 30 40 20 20 | 120 120 120 120 — | |
| Collector – Emitter Saturation Voltage ^{5/} I _C = 10 mA, I _B = 1.0 mA I _C = 30 mA, I _B = 3.0 mA I _C = 100 mA, I _B = 10 mA I _C = 10 mA, I _B = 1.0 mA, T _A = 125°C | V _{CE(Sat)} | — — — — | 0.20 0.25 0.45 0.30 | Volts |
| Base – Emitter Saturation Voltage ^{5/} I _C = 10 mA, I _B = 1.0 mA I _C = 30 mA, I _B = 3.0 mA I _C = 100 mA, I _B = 10 mA I _C = 10 mA, I _B = 1.0 mA, T _A = -55°C I _C = 10 mA, I _B = 1.0 mA, T _A = 125°C | V _{BE(Sat)} | 0.7 — 0.8 — 0.59 | 0.85 0.9 1.2 1.02 — | Volts |
| 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} t _{off} t _s | — — — | 12 18 13 | ns |

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:
 SFT2369A2GW

| 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 #: TR0045B

DOC