



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/}

SFT2907A -4 TX

- Screening ^{2/}: _ = Not Screened
- TX = TX Level
- TXV = TXV Level
- S = Space Level
- Package: ^{3/} -4 = LCC4
- /18 = TO-18

SFT2907A SERIES

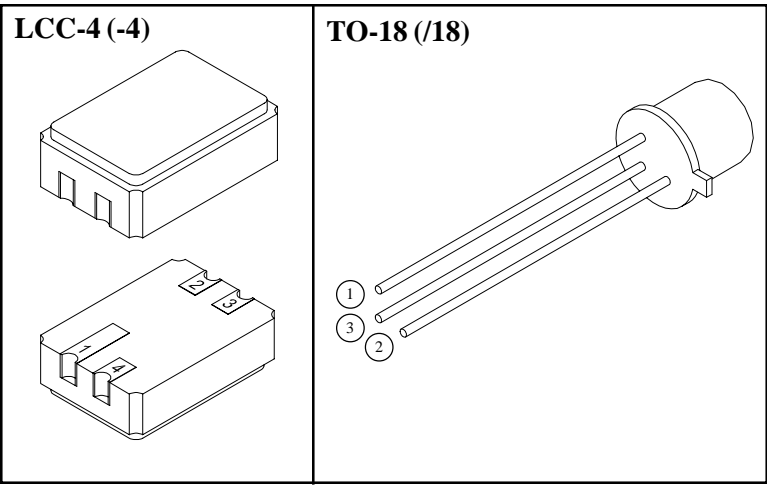
600 mA 60 VOLTS PNP HIGH SPEED LOW POWER TRANSISTOR

- FEATURES**
- BV_{CEO} 60V min.
 - Fast Switching
 - High Frequency
 - High Linear Gain, Low Saturation Voltage.
 - 200°C Operating, Gold Eutectic Die Attach.
 - Replaces 2N2907 types
 - Design for Complimentary Use with SFT2222A
 - TX, TXV, and S Level Available

MAXIMUM RATINGS	SYMBOL	VALUE	UNITS
Collector-Base Voltage	V _{CBO}	60	Volts
Collector-Emitter Voltage	V _{CEO}	60	Volts
Emitter-Base Voltage	V _{EBO}	5.0	Volts
Continuous Collector Current	I _C	600	mAmps
Base Current	I _B	50	mAmps
Operating and Storage Temperature	T _J , T _{STG}	-65 to +175	°C
Total Device Dissipation @ T _C ≤ 25°C Derate above 25°C	P _D	1.8 10.3	W mW/°C

Available Part Numbers:
SFT2907A-4
SFT2907A/18

PIN ASSIGNMENT				
Code	Function	Collector	Emitter	Base
-4	Normal	Pin 1	Pin 2	Pin 3
/18	Normal	Pin 1	Pin 2	Pin 3



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

DATA SHEET #: TR0022A www.DataSheet4U.com

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ELECTRICAL CHARACTERISTICS ^{4/}		SYMBOL	MIN	MAX	UNITS
Collector-Emitter Breakdown Voltage ($I_C = 10\text{mA}$)		BV_{CEO}	60	-	V_{DC}
Collector-Base Sustaining Voltage ($I_C = 10\mu\text{A}$)		BV_{CBO}	60	-	V_{DC}
Emitter-Base Sustaining Voltage ($I_E = 10\mu\text{A}$)		BV_{EBO}	5	-	V_{DC}
Collector Cutoff Current ($V_{CE} = 30V_{DC}$, $V_{BE} = 0.5V_{DC}$)		I_{CEX}	-	50	nA_{DC}
Collector Cutoff Current ($V_{CB} = 50V_{DC}$)		I_{CBO}	-	10	nA_{DC}
DC Current Gain* ($V_{CE} = 10V_{DC}$)		H_{FE}	$I_C = 0.1\text{mA}_{DC}$ 75	-	
			$I_C = 1\text{mA}_{DC}$ 100	-	
			$I_C = 10\text{mA}_{DC}$ 100	-	
			$I_C = 150\text{mA}_{DC}$ 100	300	
			$I_C = 500\text{mA}_{DC}$ 50	-	
Collector-Emitter Saturation Voltage *	$I_C = 150\text{mA}_{DC}$, $I_B = 15\text{mA}_{DC}$ $I_C = 500\text{mA}_{DC}$, $I_B = 50\text{mA}_{DC}$	$V_{CE(SAT)}$	-	0.4 1.6	V_{DC}
Base-Emitter Saturation Voltage *	$I_C = 150\text{mA}_{DC}$, $I_B = 15\text{mA}_{DC}$ $I_C = 500\text{mA}_{DC}$, $I_B = 50\text{mA}_{DC}$	$V_{BE(SAT)}$	-	1.3 2.6	V_{DC}
AC Current Gain ($I_C = 50\text{mA}_{DC}$, $V_{CE} = 20V_{DC}$, $f = 100\text{MHz}$)		h_{FE}	2.0	-	
Input Capacitance ($V_{BE} = 0.5V_{DC}$, $I_E = 0$, $f = 100\text{kHz}$)		C_{ib}	-	30	pF
Output Capacitance ($V_{CB} = 10V_{DC}$, $I_E = 0$, $f = 100\text{kHz}$)		C_{ob}	-	8	pF
Delay Time	$V_{CC} = -30V_{DC}$, $I_{CS} = 150\text{mA}_{DC}$, $I_{B1} = 15\text{mA}_{DC}$,	t_d	-	10	$nsec$
Rise Time		t_r	-	40	$nsec$
Storage Time	$V_{CC} = -6V_{DC}$, $I_{CS} = 150\text{mA}_{DC}$, $I_{B1} = 15\text{mA}_{DC}$, $I_{B2} = 15\text{mA}_{DC}$	t_s	-	80	$nsec$
Fall Time		t_f	-	30	$nsec$

NOTES:

- 1/ For Ordering Information, Price, and Availability Contact Factory.
- 2/ Screening per MIL-PRF-19500.
- 3/ For Package Outlines Contact Factory.
- 4/ $T_C = 25^\circ\text{C}$, Unless Otherwise Specified.
- * Pulse Test: Pulse Width = 300us, Duty Cycle = 2%

Package Outline

Part Number	Document
SFT2907A-4	60-0149-323
SFT2907A/18	60-0149-018