



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/}

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 @ $T_C \leq 25^\circ\text{C}$ Derate above 25°C	P_D	1.8 10.3	W mW/°C

Available Part Numbers:

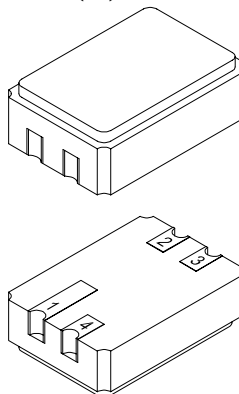
SFT2907A-4

SFT2907A/18

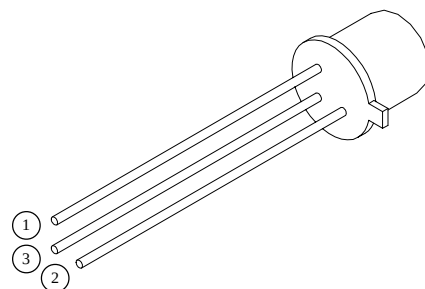
PIN ASSIGNMENT

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

LCC-4 (-4)



TO-18 (/18)



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

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ELECTRICAL CHARACTERISTICS ^{4/}		SYMBOL	MIN	MAX	UNITS
Collector-Emitter Breakdown Voltage (I _C = 10mA)		BV _{CEO}	60	-	V _{DC}
Collector-Base Sustaining Voltage (I _C = 10μA)		BV _{CBO}	60	-	V _{DC}
Emitter-Base Sustaining Voltage (I _E = 10μA)		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}) I _C = 0.1mA _{DC} I _C = 1mA _{DC} I _C = 10mA _{DC} I _C = 150mA _{DC} I _C = 500mA _{DC}		H _{FE}	75	-	
			100	-	
			100	-	
			100	300	
			50	-	
Collector-Emitter Saturation Voltage *	I _C = 150mA _{DC} , I _B = 15mA _{DC}	V _{CE(SAT)}	-	0.4	V _{DC}
	I _C = 500mA _{DC} , I _B = 50mA _{DC}		-	1.6	
Base-Emitter Saturation Voltage *	I _C = 150mA _{DC} , I _B = 15mA _{DC}	V _{BE(SAT)}	-	1.3	V _{DC}
	I _C = 500mA _{DC} , I _B = 50mA _{DC}		-	2.6	
AC Current Gain (I _C = 50mA _{DC} , V _{CE} = 20V _{DC} , f = 100MHz)		h _{FE}	2.0	-	
Input Capacitance (V _{BE} = 0.5V _{DC} , I _E = 0, f = 100kHz)		C _{ib}	-	30	pF
Output Capacitance (V _{CB} = 10V _{DC} , I _E = 0, f = 100kHz)		C _{ob}	-	8	pF
Delay Time	V _{CC} = -30V _{DC} , I _{CS} = 150mA _{DC} , I _{B1} = 15mA _{DC} ,	t _d	-	10	nsec
Rise Time		t _r	-	40	nsec
Storage Time	V _{CC} = -6V _{DC} , I _{CS} = 150mA _{DC} , I _{B1} = 15mA _{DC} , I _{B2} = 15mA _{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