SOLID STATE DEVICES, INC.
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Phone: (562) 404-7855 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SFT2907A SERIES

DESIGNER'S DATA SHEET

600 mA 60 VOLTS PNP HIGH SPEED LOW POWER TRANSISTOR

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

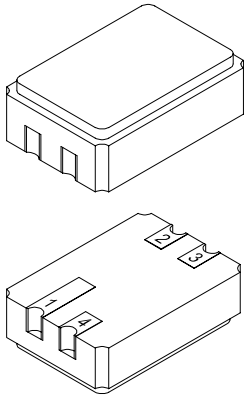
FEATURES
- **BV_{CEO} 60V min.**
- **Fast Switching**
- **High Frequency**
- **High Linear Gain, Low Saturation Voltage.**
- **200°C Operating, Gold Eutectic Die Attach.**
- **Replaces 2N2907 types**
- **Design for Complimentary Use with SFT2222A**
- **TX, TXV, and S Level Available**

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 @ $T_C \leq 25°C$ **Derate above 25°C**	P_D	1.8 10.3	W mW/°C

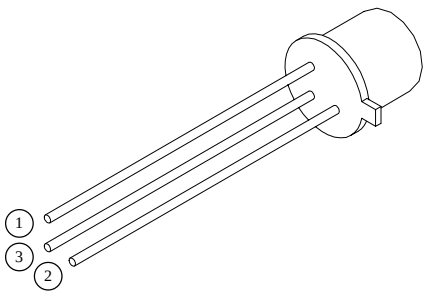
Available Part Numbers:
SFT2907A-4
SFT2907A/18

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 50	- - - 300 -	
Collector-Emitter Saturation Voltage *	I_C = 150mA_{DC}, I_B = 15mA_{DC} I_C = 500mA_{DC}, I_B = 50mA_{DC}	$V_{CE(SAT)}$	- -	0.4 1.6	V_{DC}
Base-Emitter Saturation Voltage *	I_C = 150mA_{DC}, I_B = 15mA_{DC} I_C = 500mA_{DC}, I_B = 50mA_{DC}	$V_{BE(SAT)}$	-	1.3 2.6	V_{DC}
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°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