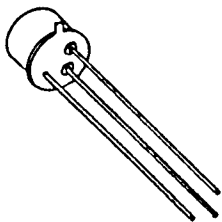


SFT179G	
7 AMP HIGH ENERGY PNP TRANSISTOR 80 VOLTS	SSDI
	14849 FIRESTONE BLVD. LA MIRADA, CA 90638 TEL: (213) 921-9660 FAX: (213) 921-2396

CASE STYLE
JEDEC TO-5
FEATURES

- ▶ DESIGNED FOR COMPLIMENTARY USE WITH SFT177G
- ▶ VERY RUGGED, SINGLE DIFFUSED CONSTRUCTION
- ▶ FAST SWITCHING, 1 μ s STORAGE TIME
- ▶ BVCEO 80 VOLTS MIN
- ▶ LINEAR GAIN, LOW SATURATION VOLTAGE
- ▶ 200 °C OPERATING, GOLD EUTECTIC DIE ATTACH

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	VCEO	80	Volts
Collector-Base Voltage	VCBO	100	Volts
Emitter-Base Voltage	VEBO	7	Volts
Collector Current	IC	7	Amps
Base Current	IB	2	Amps
Total Device Dissipation @ TC=50 °C Derate above 50 °C	PD	10 66.6	Watts mW/ °C
Operating and Storage Temperature	Tj, Tstg	-65 to +200	°C

THERMAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNIT
Thermal Restistance, Junction to Case	R θ JC	15	°C/W

ELECTRICAL CHARACTERISTICS

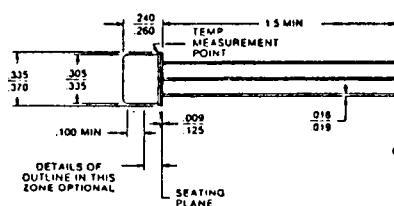
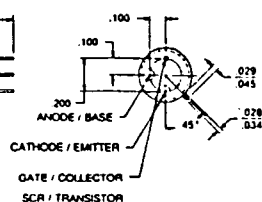
CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
Collector-Emitter Breakdown Voltage * (IC = 100mA _{dc})	BVCEO*	80		V _{dc}
Collector-Base Breakdown Voltage * (IC = 200 μ A _{dc})	BVCBO	100		V _{dc}
Emitter-Base Breakdown Voltage * (IE = 200 μ A _{dc})	BVEBO	7		V _{dc}

ELECTRICAL CHARACTERISTICS

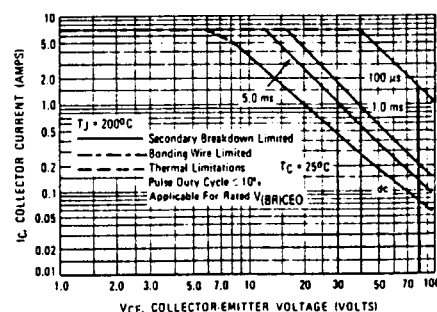
CHARACTERISTICS	SYMBOL	MIN.	MAX.	UNIT
Collector Cutoff Current ($V_{CE}=80\text{ Vdc}$) ($V_{CE}=80\text{ Vdc}$, $V_{BE}=1.5\text{ Vdc}$) ($V_{CE}=80\text{ Vdc}$, $V_{BE}=1.5\text{ Vdc}$, $T_C=150^\circ\text{C}$)	I_{CEO} I_{CEX}		5 5 1.0	μAdc μAdc mAdc
Collector Cutoff Current ($V_{CB}=100\text{ Vdc}$)	I_{CBO}		5	μAdc
Emitter Cutoff Current ($V_{EB}=5\text{ Vdc}$)	I_{EBO}		5	μAdc
DC Current Gain * ($I_C=500\text{ mAdc}$, $V_{CE}=4\text{ Vdc}$) ($I_C=2.5\text{ Adc}$, $V_{CE}=4\text{ Vdc}$) ($I_C=5\text{ Adc}$, $V_{CE}=4\text{ Vdc}$)	$h_{FE} *$	50 50 15	200	
Collector-Emitter Saturation Voltage * ($I_C = 2\text{ Adc}$, $I_B = 200\text{ mAdc}$) ($I_C = 4\text{ Adc}$, $I_B = 400\text{ mAdc}$)	$V_{CE(SAT)} *$		0.6 1.0	Vdc Vdc
Base-Emitter Saturation Voltage * ($I_C = 4\text{ Adc}$, $I_B = 0.4\text{ Adc}$)			1.5	Vdc
Current-Gain - Bandwidth Product ($I_C=250\text{ mAdc}$, $V_{CE}=10\text{ Vdc}$, $f=1\text{ MHz}$)	f_T	5		MHz
Output Capacitance ($V_{CB}=10\text{ Vdc}$, $I_E=0$, $f=1\text{ MHz}$)	C_{ob}		150	pf
Rise Time Storage Time Fall Time	($V_{CC} = 30\text{ Vdc}$, $V_{EB}(\text{off}) = 3\text{ Vdc}$, $I_C = 2.5\text{ Adc}$, $I_{B1} = I_{B2} = 250\text{ mAdc}$)	t_r t_s t_f	700 1.2 1.2	ns μs μs

*) Pulse Test: Pulse width = 300 μs , Duty Cycle = 2 %.

PHYSICAL DIMENSIONS



TYPICAL OPERATING CURVES



SSDI

SOLID STATE DEVICES, INC.

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SFT179G