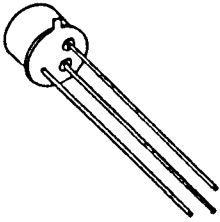


<b>SFT179G</b>	
<b>7 AMP</b> <b>HIGH ENERGY</b> <b>PNP TRANSISTOR</b> <b>80 VOLTS</b>	<b>SSDI</b>  14849 FIRESTONE BLVD. LA MIRADA, CA 90638 TEL: (213) 921-9660 FAX: (213) 921-2396

**CASE STYLE**  
**JEDEC TO-5**
**FEATURES**


- ▶ DESIGNED FOR COMPLIMENTARY USE WITH SFT177G
- ▶ VERY RUGGED, SINGLE DIFFUSED CONSTRUCTION
- ▶ FAST SWITCHING, 1 $\mu$ 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 $\theta$ JC	15	°C/W

**ELECTRICAL CHARACTERISTICS**

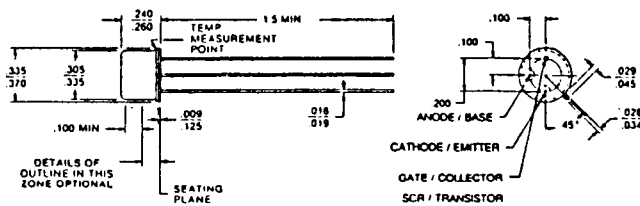
CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
Collector-Emitter Breakdown Voltage * (IC = 100mA <sub>dc</sub> )	BVCEO*	80		V <sub>dc</sub>
Collector-Base Breakdown Voltage * (IC = 200 $\mu$ A <sub>dc</sub> )	BVCBO	100		V <sub>dc</sub>
Emitter-Base Breakdown Voltage * (IE = 200 $\mu$ A <sub>dc</sub> )	BVEBO	7		V <sub>dc</sub>

# ELECTRICAL CHARACTERISTICS

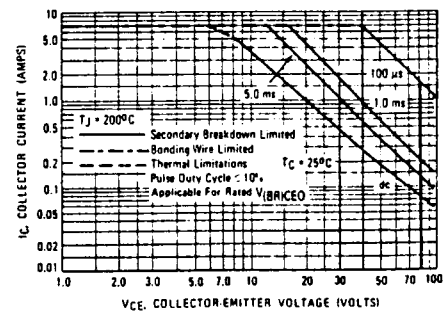
CHARACTERISTICS	SYMBOL	MIN.	MAX.	UNIT
Collector Cutoff Current (VCE=80 Vdc) (VCE=80 Vdc, VBE=1.5 Vdc) (VCE=80 Vdc, VBE=1.5 Vdc, TC=150 °C)	ICEO ICEX		5 5 1.0	μAdc μAdc mAdc
Collector Cutoff Current (VCB=100 Vdc)	ICBO		5	μAdc
Emitter Cutoff Current (VEB=5 Vdc)	IEBO		5	μAdc
DC Current Gain * (IC=500 mAdc, VCE=4 Vdc) (IC=2.5 Adc, VCE=4 Vdc) (IC=5 Adc, VCE=4 Vdc)	hFE *	50 50 15	200	
Collector-Emitter Saturation Voltage * (IC = 2 Adc, IB = 200 mAdc) (IC = 4 Adc, IB = 400 mAdc)	VCE(SAT)*		0.6 1.0	Vdc Vdc
Base-Emitter Saturation Voltage * (IC = 4 Adc, IB = 0.4 Adc)			1.5	Vdc
Current-Gain - Bandwidth Product (IC=250 mAdc, VCE=10 Vdc, f=1 MHz)	fT	5		MHz
Output Capacitance (VCB=10 Vdc, IE=0, f=1MHz)	Cob		150	pf
Rise Time	(Vcc= 30Vdc, VEB(off) =	tr	700	ns
Storage Time	3 Vdc, IC = 2.5Adc,	ts	1.2	μs
Fall Time	IB1 = IB2 = 250 mAdc)	tf	1.2	μs

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

## PHYSICAL DIMENSIONS



## TYPICAL OPERATING CURVES



**SSDI**

**SOLID STATE DEVICES, INC.**

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TEL. (213) 921-9660 ♦ FAX. (213) 921-2396

SFT179G