



14830 Valley View Avenue
 La Mirada, CA 90638
 562-404-4474 F# 562-404-1773

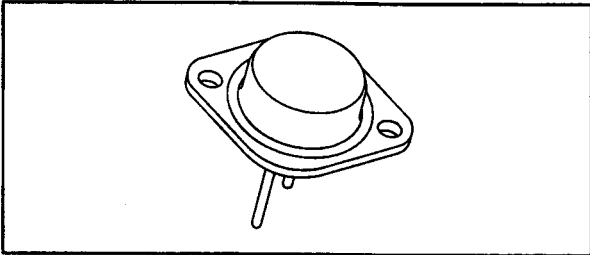
**SFT2010/3
 SFT2012/3
 SFT2014/3**

Designer's Data Sheet

**200 AMP
 100-140 VOLTS
 NPN TRANSISTOR**

FEATURES:

- BV(CBO) 250 Volts minimum
- 600W Power Dissipation
- Excellent SOA Curve
- Es/b of 800mJ
- Gain of over 5 at 200 Amps
- High Rel Construction including Gold Eutectic Die Mounting, Aluminum Wiring
- Planar chip construction with Low Leakage and very Fast Switching

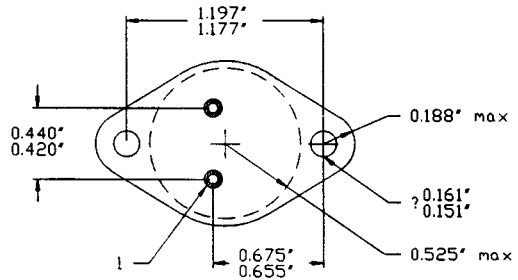
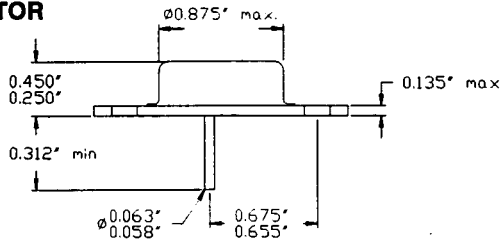


MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	V _{CEO}	100 120 140	V
Collector-Base Voltage	V _{CBO}	250	V
Emitter-Base Voltage	V _{EBO}	8	V
Collector Current	I _C	200	A
Base Current	I _B	75	A
Total Device Dissipation @ TC= 50°C Derate above 50°C	P _D	600 4	W W/°C
Operating and Storage Temperature	T _j , T _{stj}	-65 to +200	°C
Thermal Resistance, Junction to Case	R _{θJC}	0.25	°C/W

PACKAGE OUTLINE: TO-3

**PIN OUT:
 PIN 1: BASE
 PIN 2: EMITTER
 CASE: COLLECTOR**



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

DATA SHEET: XN0039D

SFT2010/3
SFT2012/3
SFT2014/3



SOLID STATE DEVICES, INC
 14830 Valley View Avenue
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ELECTRICAL CHARACTERISTICS @ T_J=25° C (Unless Otherwise Specified)

RATING	SYMBOL	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage (I _C = 200mA)	SFT2010 SFT2012 SFT2014 BV_{CEO}	100 120 140		---	V
Collector- Base Breakdown Voltage (I _C = 100μA)	BV_{CBO}	250		---	V
Emitter-Base Breakdown Voltage (I _E = 100μA)	BV_{EBO}	8		---	V
Collector Cutoff Current (V _{CB} = 250 Vdc)	I_{CBO}	---		10	μA
Emitter Cutoff Current (V _{EB} = 7 Vdc)	I_{EBO}	---		10	μA
DC Current Gain (I _C = 10 Adc, V _{CE} = 2 Vdc) (I _C = 100 Adc, V _{CE} = 5 Vdc) (I _C = 200 Adc, V _{CE} = 5 Vdc)	HFE	40 30 5		---	
Collector -Emitter Saturation Voltage (I _C = 120 Adc, I _B = 12 Adc) (I _C = 200 Adc, I _B = 30 Adc)	V_{CE(SAT)}	---		2 3	V
Base-Emitter Saturation Voltage (I _C = 120 Adc, I _B = 12 Adc)	V_{BE(SAT)}	---		2.2	V
Current Gain Bandwidth Product (I _C = 1 Adc, V _{CE} = 10 Vdc, f= 10 MHz)	f_T	50		---	MHz
Output Capacitance (V _{CB} = 10 Vdc, I _E = 0 Adc, f=1MHz)	C_{ob}	---		1200	pF
Energy, Secondary Breakdown	I _B =2Adc, V _{BE(off)} =2.0Vdc R _{B1} =R _{B2} =20Ω, L=1mH V _{CLAMP} =110V	Es/b	800	---	mJ
Current, Secondary Breakdown	V _{CE} =6Vdc, I _C = 100A V _{CE} =100Vdc, I _C =0.5A	I_{s/b}	1 1	---	sec
Rise Time	V _{CC} = 60 Vdc	t_{on}	---	500	nsec
Storage Time	I _C = 30 Adc	t_s	---	1500	nsec
Fall Time	I _{B1} =I _{B2} = 1 Adc	t_f	---	400	nsec

For thermal derating curves and other characteristic curves please contact SSDI Marketing Department.

NOTES: