PRELIMINARY

SFT1192

SOLID STATE DEVICES, INC.
14005 Stage Road * Santa Fe Springs, Ca 90670
Phone: (562) 404-4474 * Fax: (562) 404-1773

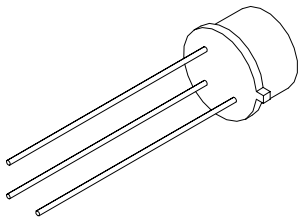
2 AMP
500 VOLTS
PNP TRANSISTOR

DESIGNER'S DATA SHEET

FEATURES:

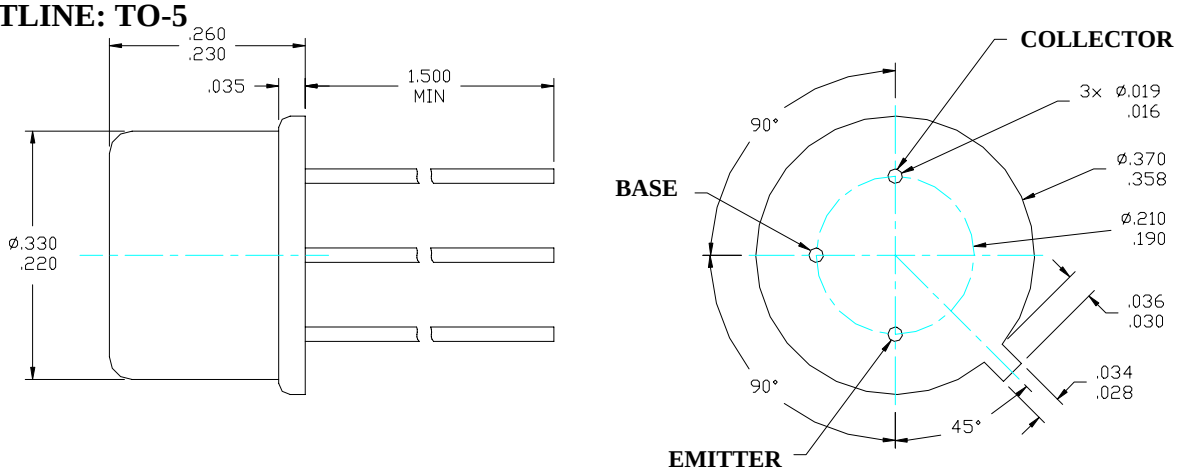
- **BV_{CEO} 400V.**
- **Fast Switching.**
- **High Frequency.**
- **Low Saturation Voltage.**
- **200°C Operating, Gold Eutectic Die Attach.**
- **Designed for Complementary Use with SFT6800.**

TO-5



MAXIMUM RATINGS	SYMBOL	VALUE	UNITS
Collector-Emitter Voltage	V_{CEO}	400	Volts
Collector-Base Voltage	V_{CBO}	500	Volts
Emitter-Base Voltage	V_{EBO}	10	Volts
Collector Current	I_C	2	Amps
Base Current	I_B	0.5	Amps
Total Device Dissipation @ T_C=100°C Derate above 100°C	P_D	6 150	W mW/°C
Operating and Storage Temperature	T_J, T_{STG}	-65 to +200	°C
Thermal Resistance, Junction to Case	$R_{\theta JC}$	15	°C/W

CASE OUTLINE: TO-5



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

DATA SHEET #: TR0004B

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ELECTRICAL CHARACTERISTICS	SYMBOL	MIN	MAX	UNITS
Collector-Emitter Breakdown Voltage (I_C = 5mA$_{DC}$)	BV_{CEO}	400	-	V
Collector-Base Breakdown Voltage (I_C = 100uA$_{DC}$)	BV_{CBO}	500	-	V
Emitter-Base Breakdown Voltage (I_E = 20uA$_{DC}$)	BV_{EBO}	10	-	V
Collector Cutoff Current (V_{CB} = 450V$_{DC}$)	I_{CBO}	-	1.0	uA
Collector Cutoff Current (V_{CE} = 400V$_{DC}$, V_{EB} = 1.5V$_{DC}$)	I_{CEV}	-	10	uA
Emitter Cutoff Current (V_{EB} = 6V$_{DC}$)	I_{EBO}	-	10	uA
DC Current Gain* (V_{CE} =10V$_{DC}$) (I_C = 1.0mA$_{DC}$) (I_C = 50mA$_{DC}$) (I_C = 500mA$_{DC}$)	H_{FE}	80 60 40	- - -	
Collector-Emitter Saturation Voltage* (I_C =50mA$_{DC}$, I_B = 5mA$_{DC}$) (I_C =500mA$_{DC}$, I_B =50mA$_{DC}$)	$V_{CE(SAT)}$	- -	0.4 1.0	V_{DC}
Base-Emitter Saturation Voltage* (I_C =50mA$_{DC}$, I_B = 5mA$_{DC}$) (I_C =500mA$_{DC}$, I_B =50mA$_{DC}$)	$V_{BE\ (SAT)}$	- -	1.5 2.0	V_{DC}
Current Gain Bandwidth Product (I_C = 70mA$_{DC}$, V_{CE} = 30V$_{DC}$, f = 20MHz)	fT	50	-	MHz
Output Capacitance (V_{CB}= 20V$_{DC}$, I_E = 0A$_{DC}$, f = 1.0MHz)	C_{ob}	-	75	pf
Input Capacitance (V_{BE}= 2V$_{DC}$, I_C = 0A$_{DC}$, f = 1.0MHz)	C_{ib}	-	300	pf
Turn On Time (V_{CC} = 100V$_{DC}$, I_C = 500mA$_{DC}$, $V_{EB(OFF)}$=3.7V$_{DC}$, I_{B1}=I_{B2}= 50mA$_{DC}$)	$t_{(on)}$	-	250	ns
Turn Off Time	$t_{(off)}$	-	2500	ns

***Pulse Test: Pulse Width = 300us, Duty Cycle = 2%**