Silicon NPN Power Transistors 2SC1875

DESCRIPTION

- With TO-3 package
- High voltage ,high speed

APPLICATIONS

- Designed for use in large screen color deflection circuits

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	500	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		3.5	A
I_{CM}	Collector current-peak		10	A
I_B	Base current		1.0	A
P_C	Collector power dissipation	T_C=25℃	50	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}C}$	Thermal resistance junction case	2.5	℃/W

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=100mA ;I_B=0	500			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=2.5A; I_B=0.6A			10	V
V_{BEsat}	Base-emitter saturation voltage	I_C=2.5A; I_B=0.6A			1.2	V
I_{CES}	Collector cut-off current	V_{CE}=1500V; V_{BE}=0			1.0	mA
I_{CBO}	Collector cut-off current	V_{CB}=1000V; I_E=0			20	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			20	μA
h_{FE-1}	DC current gain	I_C=0.5A ; V_{CE}=10V	10		35	
h_{FE-2}	DC current gain	I_C=2A ; V_{CE}=10V	5		25	
t_s	Storage time	I_C=2.5A ; I_{B1}=-I_{B2}=0.6A Pw=20μs		10		μs
t_f	Fall time			1.0		μs

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PACKAGE OUTLINE

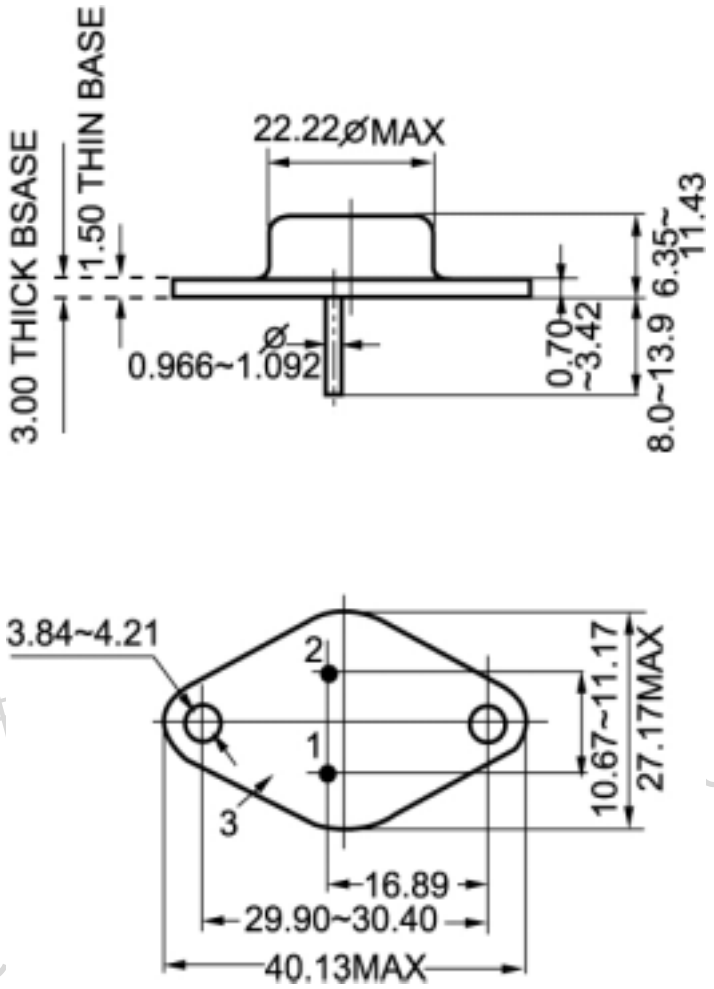

Fig.2 outline dimensions (unindicated tolerance:±0.1mm)