Silicon NPN Power Transistors 2N5734

DESCRIPTION

·With TO-3 package

·High current capability

APPLICATIONS

·For linear amplifier and inductive switching applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

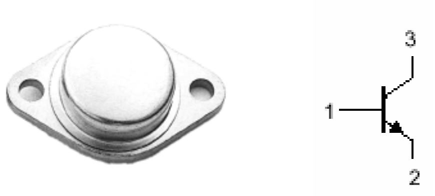

Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	80	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		30	A
I_{CM}	Collector current-peak		30	A
P_T	Total power dissipation	T_C=25□	150	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}C}$	Thermal resistance junction to case	1.17	□/W

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.2A; I_B=0	80			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	I_C=15 A;I_B=1.5 A			2.0	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	I_C=30 A;I_B=6 A			4.0	V
V_{BE}	Base-emitter on voltage	I_C=15A ; V_{CE}=2V			2.7	V
I_{CBO}	Collector cut-off current	V_{CB}=100V; I_E=0			0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=7V; I_C=0			0.1	mA
h_{FE-1}	DC current gain	I_C=10A ; V_{CE}=2V	30		300	
h_{FE-2}	DC current gain	I_C=20A ; V_{CE}=4V	5			
f_T	Transition frequency	I_C=1A ; V_{CE}=10V	30			MHz

PACKAGE OUTLINE

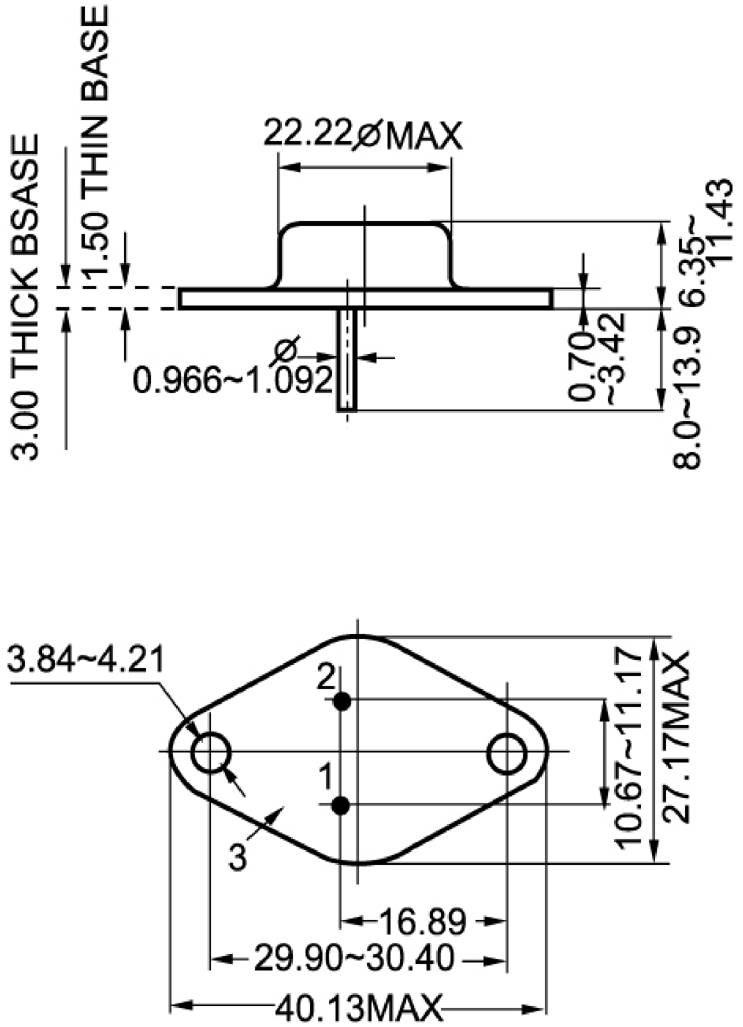

Fig.2 Outline dimensions