

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

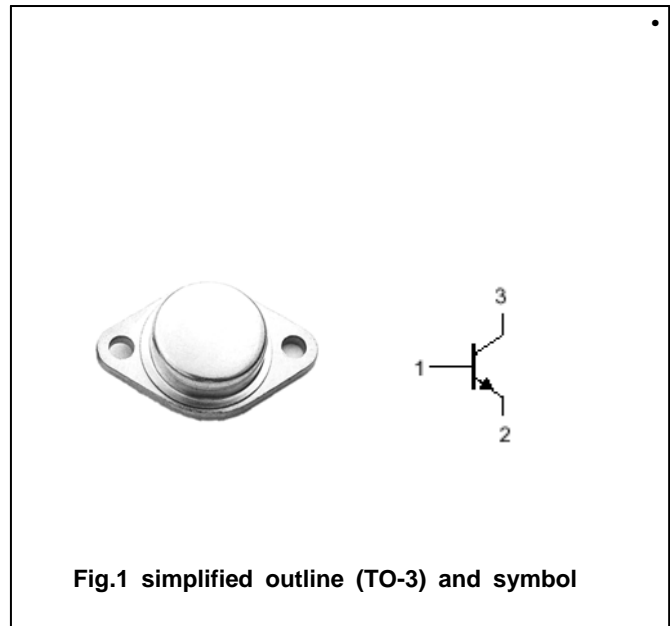


Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

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	$T_C=25^\circ\text{C}$	150	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

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

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(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

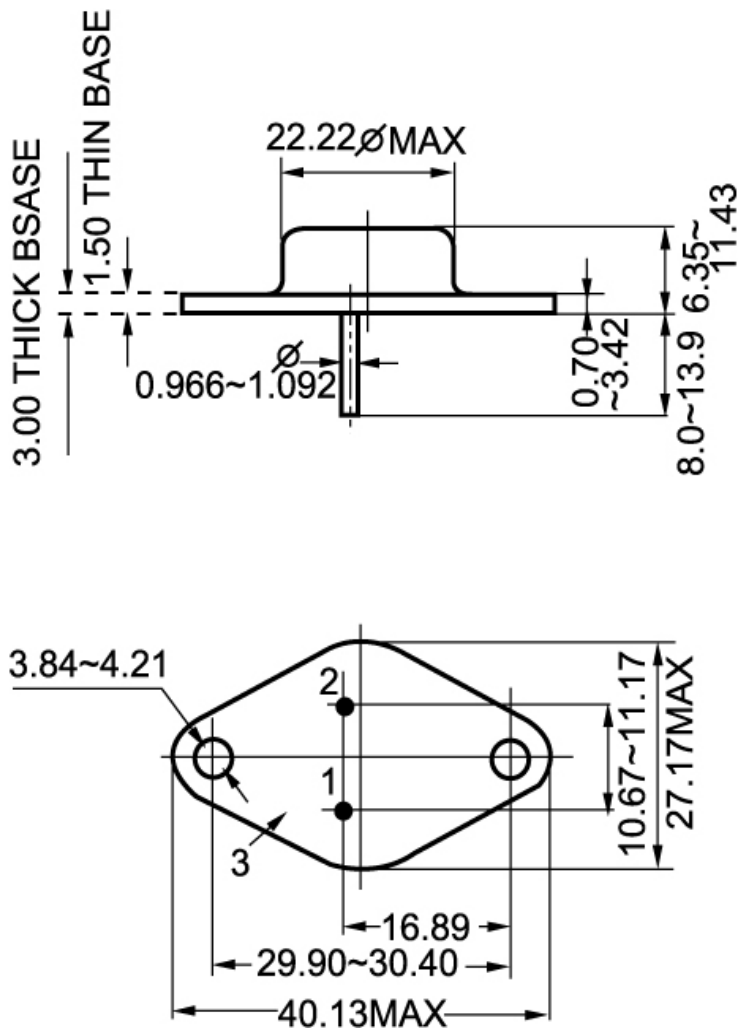


Fig.2 Outline dimensions