Silicon NPN Power Transistors 2N6470 2N6471 2N6472

DESCRIPTION

- With TO-3 package
- Low collector saturation voltage
- Excellent safe operating area
- High gain at high current

APPLICATIONS

- General-purpose types of switching and linear-amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



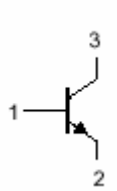


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=℃)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N6470	Open emitter	50	V
		2N6471		70	
		2N6472		90	
V_{CEO}	Collector-emitter voltage	2N6470	Open base	40	V
		2N6471		60	
		2N6472		80	
V_{EBO}	Emitter-base voltage		Open collector	5	V
I_C	Collector current			15	A
I_B	Base current			5	A
P_T	Total power dissipation		T_C=25℃	125	W
T_j	Junction temperature			150	℃
T_{stg}	Storage temperature			-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.4	℃/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	2N6470	I_C=0.2A ;I_B=0	40			V
		2N6471		60			
		2N6472		80			
$V_{CEsat-1}$	Collector-emitter saturation voltage		I_C=5A; I_B=0.5A			1.3	V
$V_{CEsat-2}$	Collector-emitter saturation voltage		I_C=15A; I_B=3A			3.5	V
V_{BE}	Base-emitter on voltage		I_C=15A ; V_{CE}=4V			3.5	V
I_{CEO}	Collector cut-off current		V_{CE}=1/2Rated V_{CEO}; I_B=0			1.0	mA
I_{CEX}	Collector cut-off current		V_{CE}= Rated V_{CEO}; V_{BE}=-1.5V T_C=150℃			0.2 5.0	mA
I_{EBO}	Emitter cut-off current		V_{EB}=5V; I_C=0			1.0	mA
h_{FE-1}	DC current gain		I_C=5A ; V_{CE}=4V	20		150	
h_{FE-2}	DC current gain		I_C=15A ; V_{CE}=4V	5			
f_T	Transition frequency		I_C=0.5A ; V_{CE}=10V	4			

PACKAGE OUTLINE

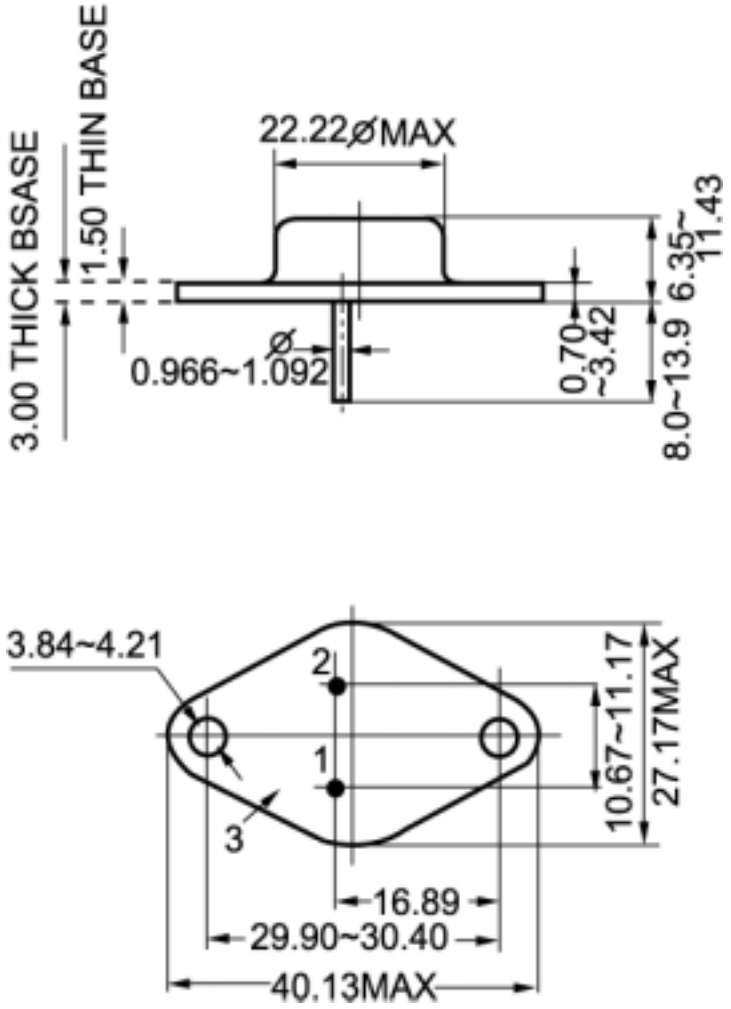


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)