Silicon NPN Power Transistors 2N3237

DESCRIPTION

- With TO-3 package
- Excellent safe operating area
- Low collector saturation voltage

APPLICATIONS

- For power amplifier and switching circuits applications

PINNING

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	90	V
V_{CEO}	Collector-emitter voltage	Open base	90	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		20	A
I_B	Base current		7.5	A
P_D	Total power dissipation	T_C=25℃	200	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	0.875	℃/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=0.2A ;I_B=0	90			V
$V_{CE(sat)-1}$	Collector-emitter saturation voltage	I_C=10A; I_B=1.0A			1.4	V
$V_{CE(sat)-2}$	Collector-emitter saturation voltage	I_C=20A ;I_B=4.0A			4.0	V
$V_{BE(on)}$	Base-emitter on voltage	I_C=10A ; V_{CE}=4V			2.2	V
I_{CEO}	Collector cut-off current	V_{CE}=45V; I_B=0			1.0	mA
I_{CBO}	Collector cut-off current	V_{CB}=90V; I_E=0			0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			0.1	mA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=4V	40			
h_{FE-2}	DC current gain	I_C=10A ; V_{CE}=4V	15		60	
h_{FE-3}	DC current gain	I_C=20A ; V_{CE}=4V	5			

PACKAGE OUTLINE

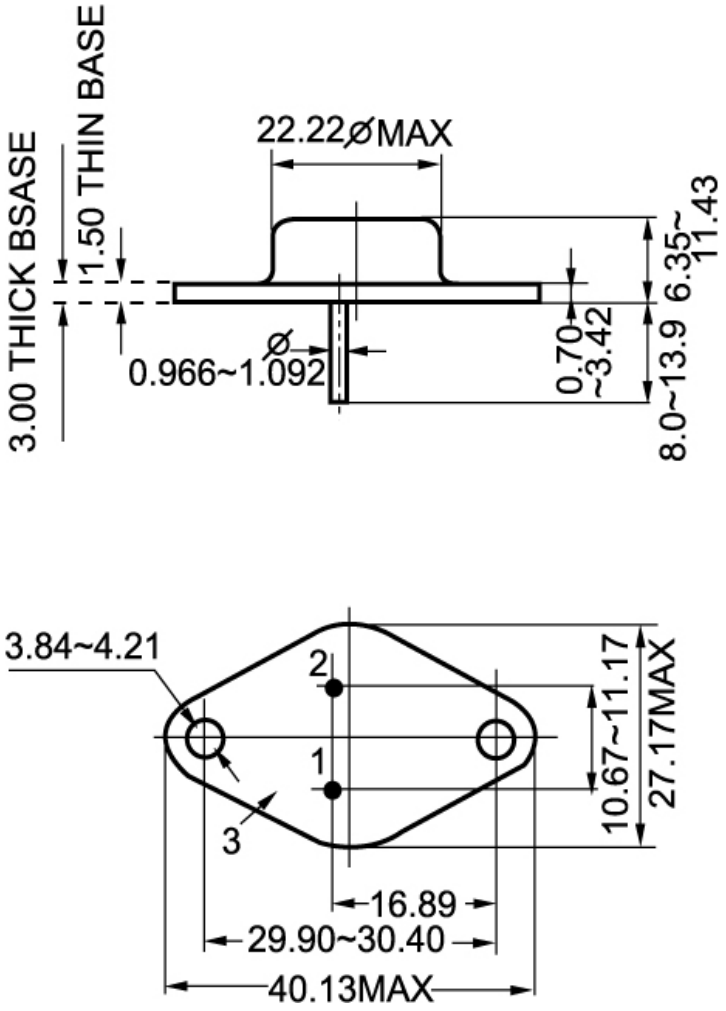

Fig.2 outline dimensions (unindicated tolerance:±0.1mm)