Silicon NPN Power Transistors 2SC2429

DESCRIPTION

·With TO-3 package
·High voltage ,high speed
·Wide area of safe operation

APPLICATIONS

·High speed switching
·Converters and inverters

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	MAX	UNIT
V_{CBO}	Collector-base voltage	Open emitter	450	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		15	A
I_{CM}	Collector current-Peak		20	A
I_B	Base current		5	A
P_T	Total power dissipation	T_C=25□	150	W
T_j	Junction temperature		175	□
T_{stg}	Storage temperature		-65~175	□

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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=1A ; R_{BE}=∞	400			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=1mA ; I_C=0	7			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=10A; I_B=2A		0.45	1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=10A; I_B=2A		1.2	2.0	V
I_{CBO}	Collector cut-off current	V_{CB}=450V; I_E=0			0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=6V; I_C=0			0.1	mA
h_{FE}	DC current gain	I_C=10A ; V_{CE}=5V	10	15	40	
f_T	Transition frequency	I_C=2A ; V_{CE}=10V,f=10MHz		35		MHz
C_{OB}	Collector output capacitance	I_E=0 ; V_{CB}=10V;f=1MHz		230		pF

Switching times

t_r	Rise time	V_{CC}=150V,I_C=10A I_{B1}=-I_{B2}=2A		0.15	0.5	μs
t_{stg}	Storage time			1.20	2.5	μs
t_f	Fall time			0.10	0.3	μs

PACKAGE OUTLINE

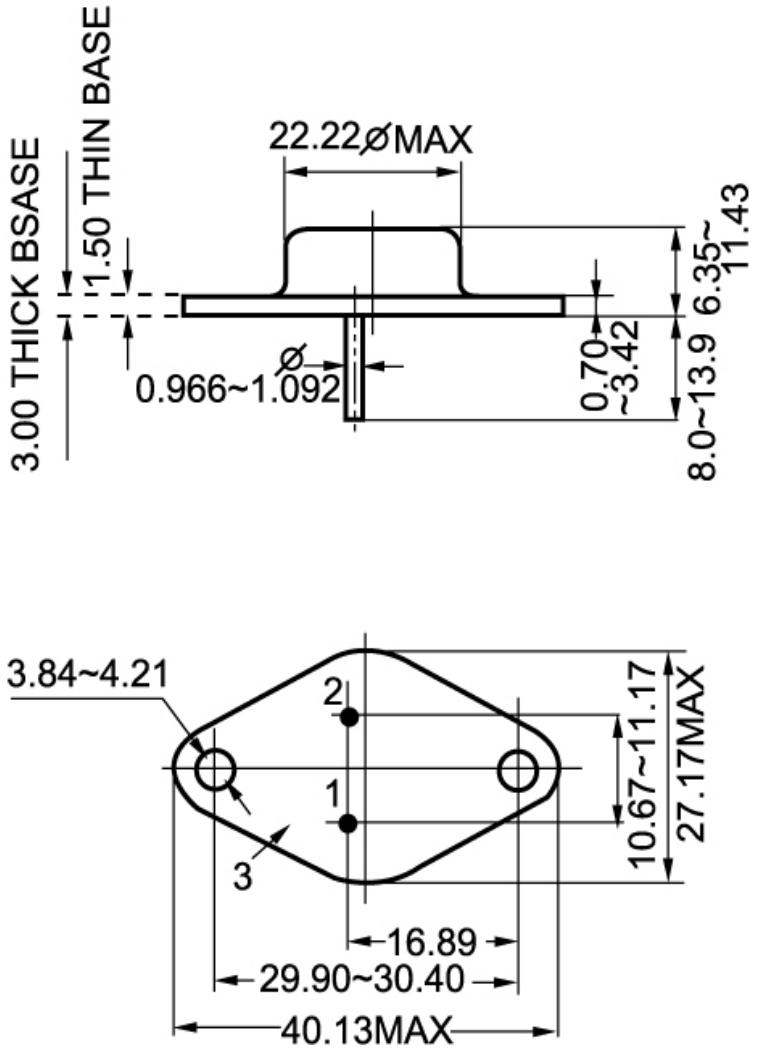


Fig.2 Outline dimensions