Silicon NPN Power Transistors 2N6354

DESCRIPTION

·With TO-3 package
·Excellent safe operating area
·Fast switching speed
·Low collector saturation voltage
·High power dissipation

APPLICATIONS

·For switching applications in military and industrial equipment

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	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	120	V
V_{EBO}	Emitter-base voltage	Open collector	6.5	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		12	A
I_B	Base current		5	A
P_D	Total Power Dissipation	T_C=25□	140	W
T_j	Junction temperature		200	□
T_{stg}	Storage temperature		-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.25	□/W

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdwon voltage	I_C=0.2A ;I_B=0	120			V
$V_{(BR)EBO}$	Emitter-base breakdwon voltage	I_E=5m A ;I_C=0	6.5			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	I_C=5A ;I_B=0.5A			0.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	I_C=10A; I_B=1A			1.0	V
$V_{BE\ sat-1}$	Base-emitter saturation voltage	I_C=5A ;I_B=0.5A			1.3	V
$V_{BE\ sat-2}$	Base-emitter saturation voltage	I_C=10A; I_B=1A			2.0	V
I_{CEO}	Collector cut-off current	V_{CE}=100V;V_{BE}=0 T_C=125□			10	mA
I_{CEV}	Collector cut-off current	V_{CE}=140V; I_B=0			10 20	mA
I_{CBO}	Collector cut-off current	V_{CB}=150V; I_E=0			5	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			5	mA
h_{FE-1}	DC current gain	I_C=5A ; V_{CE}=2V	20		150	
h_{FE-2}	DC current gain	I_C=10A ; V_{CE}=2V	10		100	
C_{OB}	Output capacitance	I_E=0 ; V_{CB}=10V;f=1MHz			300	pF

PACKAGE OUTLINE

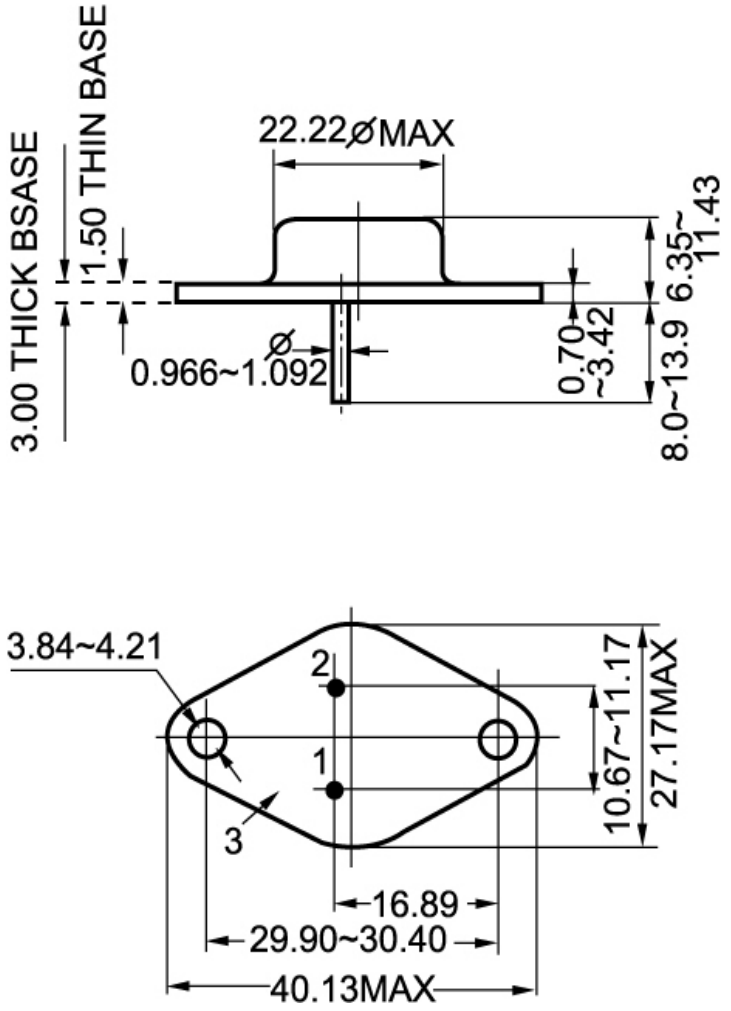

Fig.2 outline dimensions (unindicated tolerance:±0.10mm)