Silicon NPN Power Transistors 2N6547

DESCRIPTION

・With TO-3 package
・High voltage ,high speed

APPLICATIONS

Suited for 115 and 220 volt line operated switch-mode applications such as :

・Switching regulators
・PWM inverters and motor controls
・Solenoid and relay drivers
・Deflection circuits

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

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

MAXIMUN RATINGS(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	850	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	9	V
I_C	Collector current		15	A
I_{CM}	Collector current-peak		30	A
I_B	Base current		10	A
I_E	Emitter current		25	A
I_{EM}	Emitter current-peak		50	A
P_T	Total power dissipation	T_c=25℃	175	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance from junction to case	1.0	℃/W

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEO}	Collector-emitter sustaining voltage	I_C=100mA ; I_B=0	400			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	I_C=10A I_B=2A			1.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	I_C=15A I_B=3A			5.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=10A I_B=2A			1.6	V
I_{CEV}	Collector cut-off current	V_{CEV}=850V $V_{BE(off)}$=1.5V T_C=100℃			1.0 4.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=9V; I_C=0			1.0	mA
h_{FE-1}	DC current gain	I_C=5A ; V_{CE}=2V	12		60	
h_{FE-2}	DC current gain	I_C=10A ; V_{CE}=2V	6		30	
f_T	Transition frequency	I_C=0.5A ; V_{CE}=10V	6		35	MHz
Switching times						
t_d	Delay time	I_C=10A; I_{B1}=-I_{B2}=2.0A V_{CC}=250V; t_p=0.1ms; Duty Cycle≤2.0%			0.05	μs
t_r	Rise time				1.0	μs
t_s	Storage time				4.0	μs
t_f	Fall time				0.8	μs

PACKAGE OUTLINE

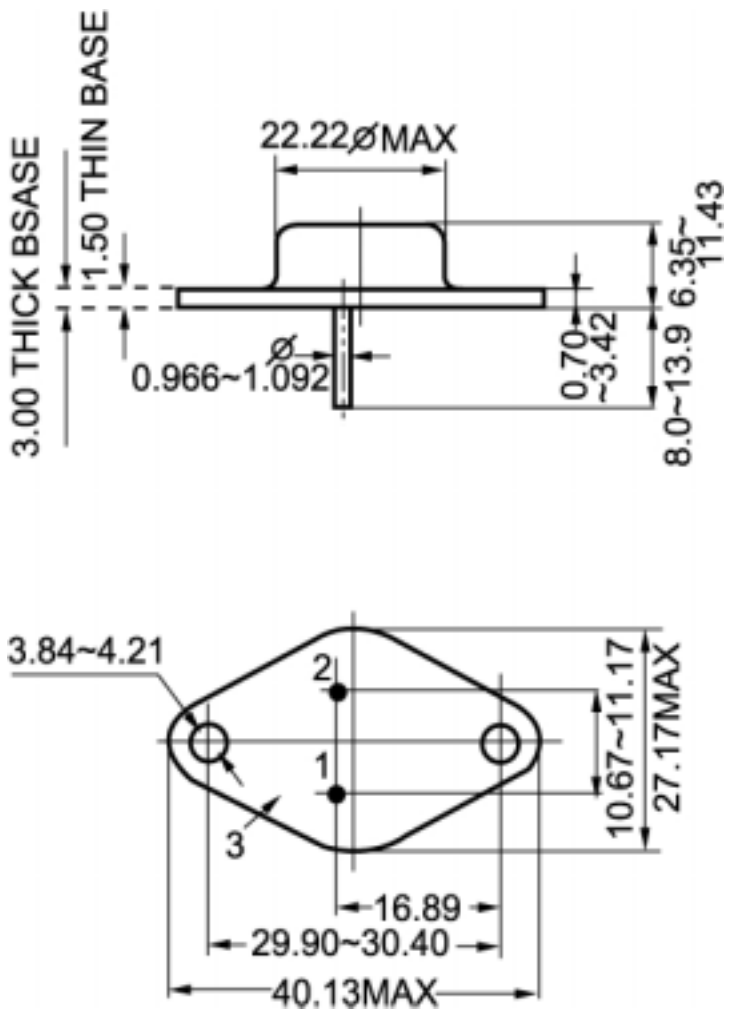

Fig.2 Outline dimensions