Silicon NPN Power Transistors 2N6360

DESCRIPTION

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

APPLICATIONS

·Designed for high power applications and switching circuits such as relay or solenoid drivers, dc to dc converters or inverters.

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

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	120	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		12	A
I_{CM}	Collector current-peak		24	A
I_B	Base current		4	A
P_D	Total Power Dissipation	T_C=25□	150	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	1.17	□/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	100			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	I_C=6A ;I_B=0.6A			1.4	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	I_C=12A; I_B=2.4A			4.0	V
V_{BE}	Base-emitter on voltage	I_C=6A ; V_{CE}=4V			2.2	V
I_{CEO}	Collector cut-off current	V_{CE}=100V; I_B=0			2.0	mA
I_{CEX}	Collector cut-off current	V_{CE}=120V; $V_{BE(off)}$=1.5V T_C=150□			2.0 10.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=7V; I_C=0			5.0	mA
h_{FE-1}	DC current gain	I_C=6A ; V_{CE}=4V	15			
h_{FE-2}	DC current gain	I_C=12A ; V_{CE}=4V	5			
f_T	Transition freuqency	I_C=1A ; V_{CE}=4V	0.2			MHz

PACKAGE OUTLINE

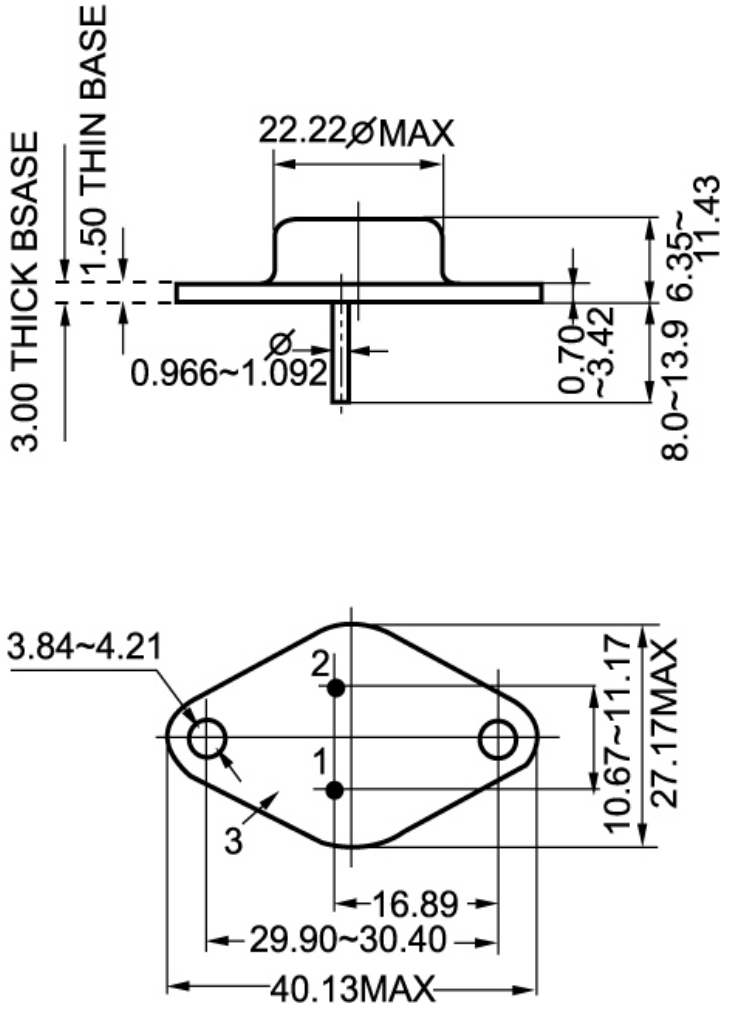

Fig.2 outline dimensions (unindicated tolerance:±0.10mm)