Silicon NPN Power Transistors 2SC3505

DESCRIPTION

·With TO-3PN package
·High voltage ,high reliability
·High speed switching

APPLICATIONS

·Switching regulators
·Ultrasonic generators
·High frequency inverters
·General purpose power amplifiers

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

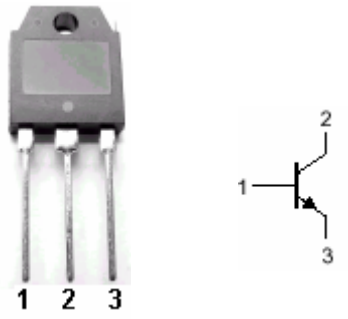

Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	900	V
V_{CEO}	Collector-emitter voltage	Open base	700	V
V_{EBO}	Emitter-base voltage	Open collector	10	V
I_C	Collector current		6	A
I_B	Base current		3	A
P_C	Collector power dissipation	T_C=25□	80	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}a}$	Thermal resistance from junction to case	1.5	□/W

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA ;I_B=0	700			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=1mA ;I_E=0	900			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=2A ;I_B=0.4A			0.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=2A ;I_B=0.4A			1.2	V
I_{CBO}	Collector cut-off current	V_{CB}=900V; I_E=0			1.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=10V; I_C=0			1.0	mA
h_{FE}	DC current gain	I_C=2A ; V_{CE}=5V	10			
Switching times						
t_{on}	Turn-on time	I_C=3A;I_{B1}=0.6A;I_{B2}=-1.2A R_L=100Ω,P_W=20μs Duty≤2%			1.0	μs
t_{stg}	Storage time				5.0	μs
t_f	Fall time				1.0	μs

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PACKAGE OUTLINE

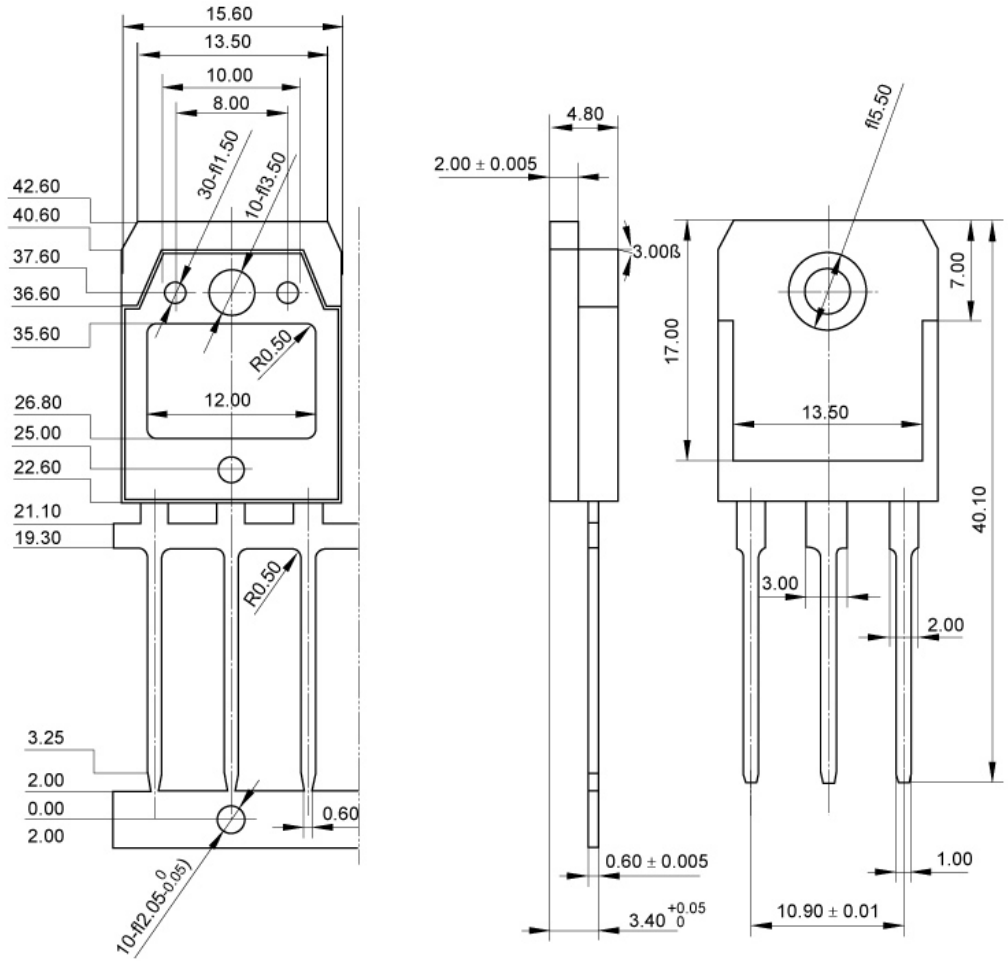

Fig.2 outline dimensions