Silicon NPN Power Transistors 2SC2944

DESCRIPTION

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

APPLICATIONS

·Color & B/W TV power supply
·Active power filter
·Industrial use power supply
·General purpose power amplifiers

PINNING

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

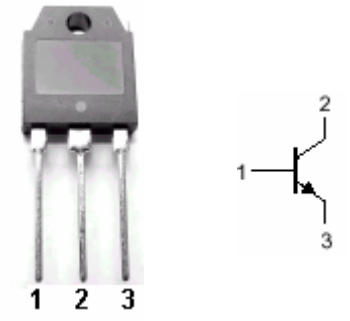


Fig.1 simplified outline (TO-3PN) and symbol

ABSOLUTE MAXIMUM RATINGS(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	250	V
V_{CEO}	Collector-emitter voltage	Open base	200	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current (DC)		15	A
I_B	Base current (DC)		5	A
P_C	Collector power dissipation	T_C=25□	100	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}C}$	Thermal resistance junction 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 breakdown voltage	I_C=10mA ; I_B=0	200			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=0.1mA ; I_C=0	7			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=0.1mA ; I_E=0	250			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=6A ;I_B=1.2A			0.8	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=6A ;I_B=1.2A			1.2	V
I_{CBO}	Collector cut-off current	V_{CB}=250V; I_E=0			0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=7V; I_C=0			0.1	mA
h_{FE}	DC current gain	I_C=2A ; V_{CE}=5V	20		80	
Switching times						
t_{on}	Turn-on time	I_C=10A; I_{B1}=-I_{B2}=2A R_L=5ΩPw=20μs,Duty≤2%			0.8	μs
t_s	Storage time				1.5	μs
t_f	Fall time				0.4	μs

PACKAGE OUTLINE

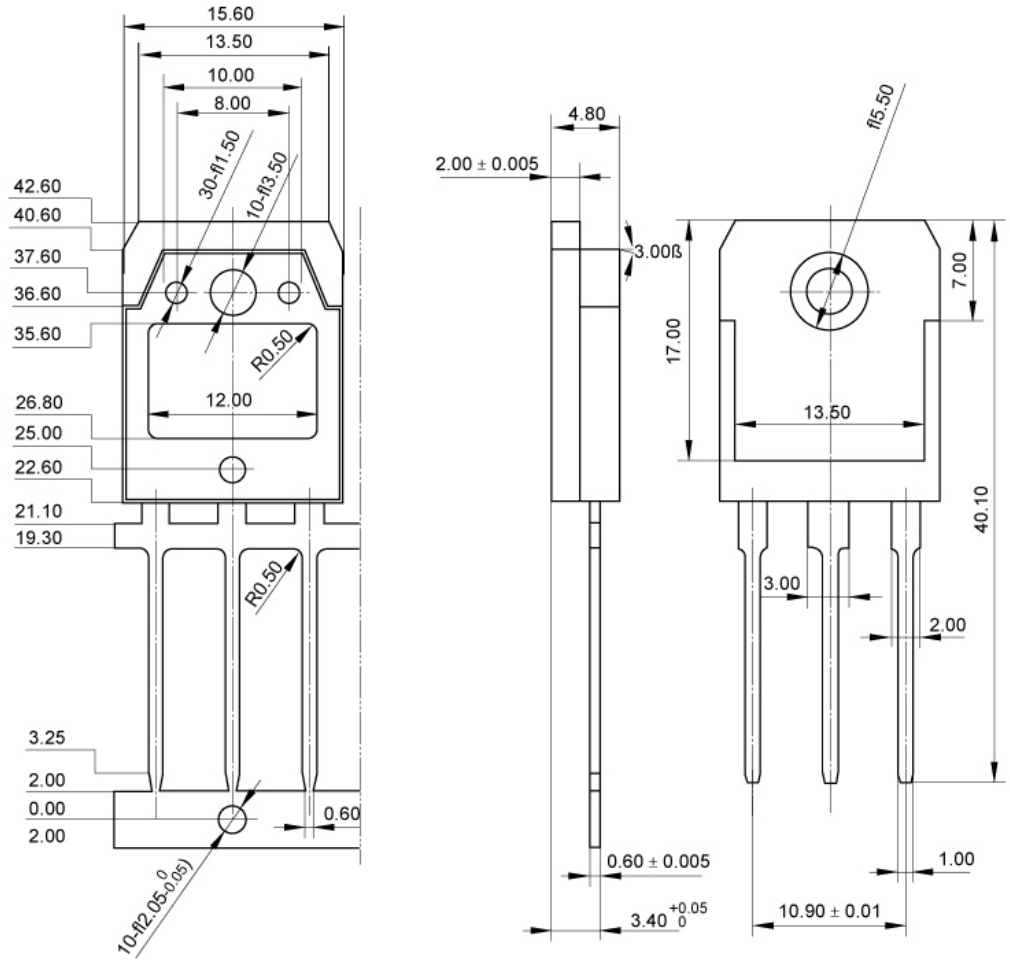


Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)