Silicon PNP Power Transistors 2SB514

DESCRIPTION

- With TO-220C package
- Complement to type 2SD330
- Low collector saturation voltage

APPLICATIONS

- Suited for use in output stage of 10W AF power amplifier

PINNING

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

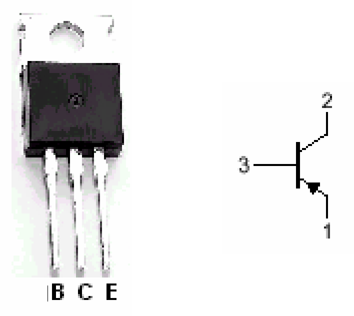

Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-50	V
V_{CEO}	Collector-emitter voltage	Open base	-50	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current (DC)		-2	A
I_{CM}	Collector current-Peak		-5	A
P_C	Collector dissipation	T_a=25℃	1.75	W
		T_C=25℃	20	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-50~150	℃

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEO}	Collector-emitter voltage	I_C=-10mA; I_B=0	-50			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-2A; I_B=-0.2A			-1.0	V
V_{BE}	Base-emitter on voltage	I_C=-1A ; V_{CE}=-5V			-1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=-20V; I_E=0			-0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=-4V; I_C=0			-1.0	mA
h_{FE-1}	DC current gain	I_C=-1A ; V_{CE}=-2V	40		320	
h_{FE-2}	DC current gain	I_C=-0.1A ; V_{CE}=-2V	35			
f_T	Transition frequency	I_C=-0.5A ; V_{CE}=-5V		8		MHz

◆ h_{FE-1} Classifications

C	D	E	F
40-80	60-120	100-200	160-320

PACKAGE OUTLINE

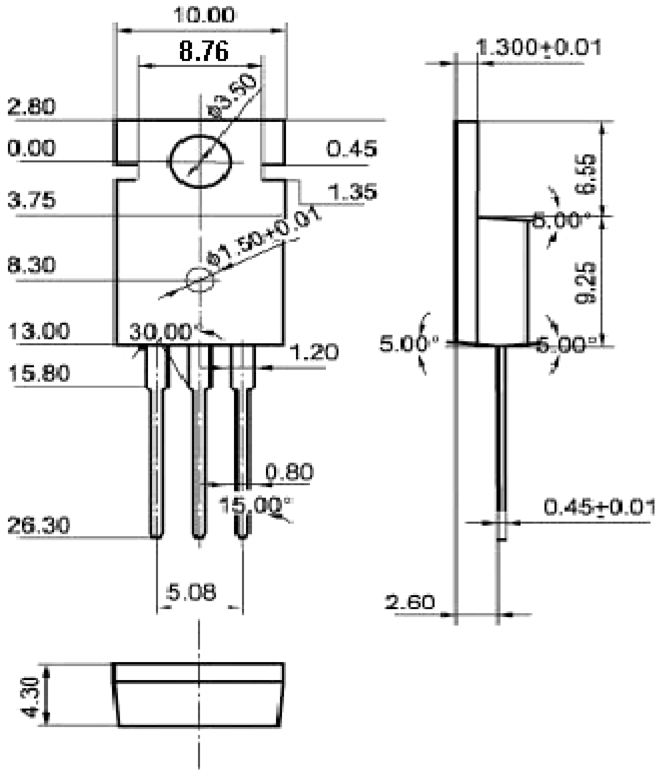

Fig.2 Outline dimensions (unindicated tolerance:±0.10mm)