

Silicon PNP Power Transistors

2SB1187

DESCRIPTION

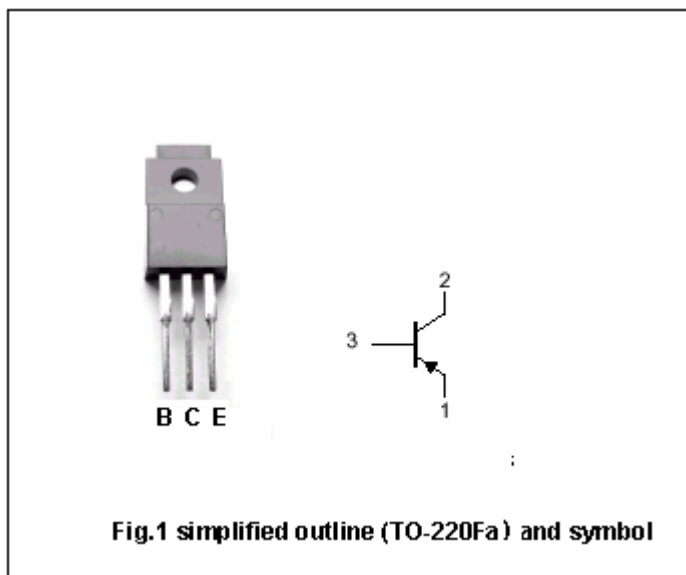
- With TO-220Fa package
- Low saturation voltage
- Complement to type 2SD1761
- Excellent DC current gain characteristics
- Wide safe operating area

APPLICATIONS

- For low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-80	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current (DC)		-3	A
I_{CM}	Collector current-Peak		-6	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	30	W
		$T_a=25^\circ\text{C}$	2	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

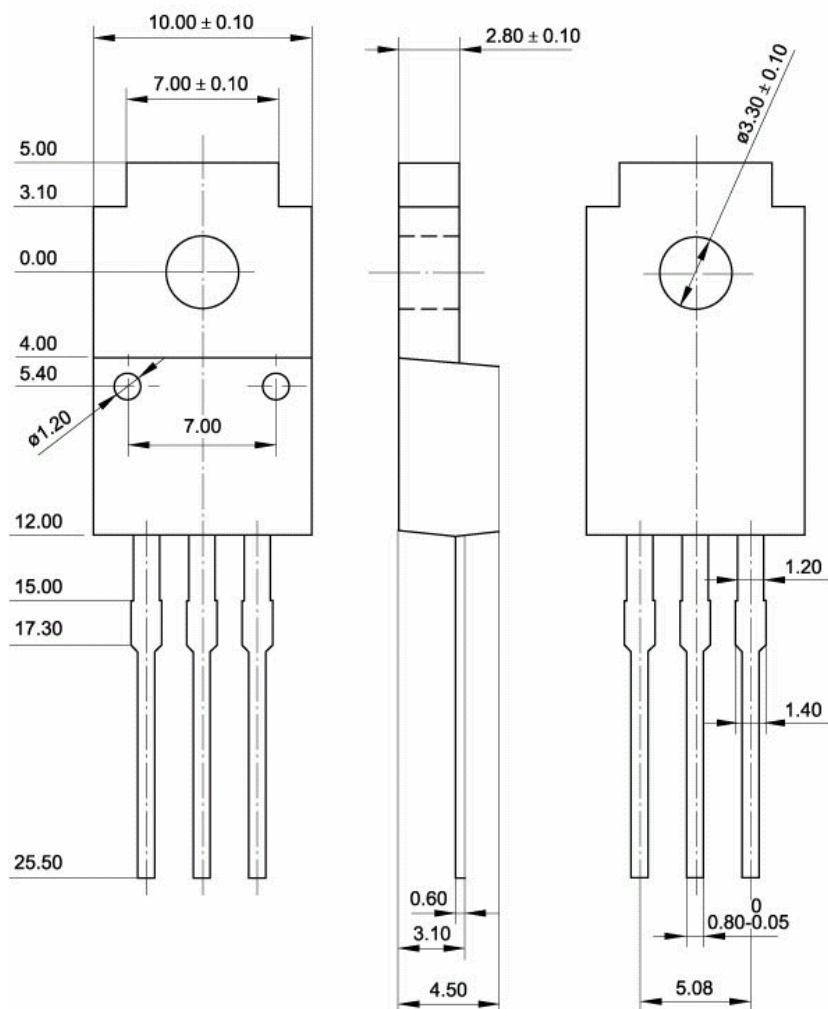
Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -1\text{mA}$, $I_B = 0$	-60			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = -50\mu\text{A}$, $I_E = 0$	-80			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -50\mu\text{A}$, $I_C = 0$	-5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -2\text{A}$; $I_B = -0.2\text{A}$			-1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C = -2\text{A}$; $I_B = -0.2\text{A}$			-1.5	V
I_{CBO}	Collector cut-off current	$V_{CB} = -60\text{V}$; $I_E = 0$			-10	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -4\text{V}$; $I_C = 0$			-10	μA
h_{FE}	DC current gain	$I_C = -0.5\text{A}$; $V_{CE} = -5\text{V}$	60		320	
f_T	Transition frequency	$I_C = -0.5\text{A}$; $V_{CE} = -5\text{V}$		12		MHz
C_{ob}	Output capacitance	$I_E = 0$; $V_{CB} = -10\text{V}$, $f = 1\text{MHz}$		100		pF

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PACKAGE OUTLINE

Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)