

Silicon 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	Base
2	Collector
3	Emitter

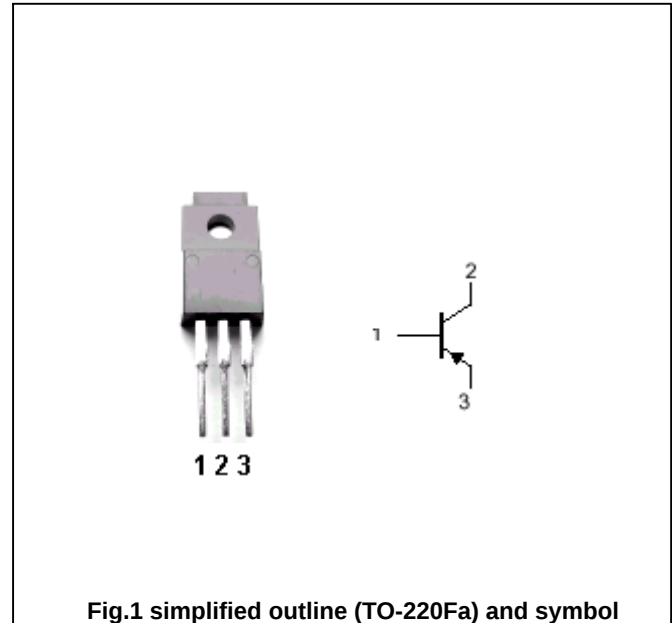


Fig.1 simplified outline (TO-220Fa) and symbol

ABSOLUTE MAXIMUM RATINGS AT $T_c=25$

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	$T_c=25$	30	W
P_C	Collector power dissipation	$T_a=25$	2	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO}	Collector-emitter breakdown voltage	I _C =1mA, I _B =0	60			V
V _{CBO}	Collector-base breakdown voltage	I _C =50 μA, I _E =0	80			V
V _{EBO}	Emitter-base breakdown voltage	I _E =50 μA, I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A I _B =0.2A			1.0	V
V _{BEsat}	Emitter-base saturation voltage	I _C =2A I _B =0.2A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =60V I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =4V; I _C =0			10	μA
h _{FE}	DC current gain	I _C =0.5A ; V _{CE} =5V	60		320	
f _T	Transition frequency	I _C =0.5A ; V _{CE} =5V		12		MHz
C _{ob}	Output capacitance	I _E =0 ; V _{CB} =10V ,f=1MHz		100		Pf

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PACKAGE OUTLINE

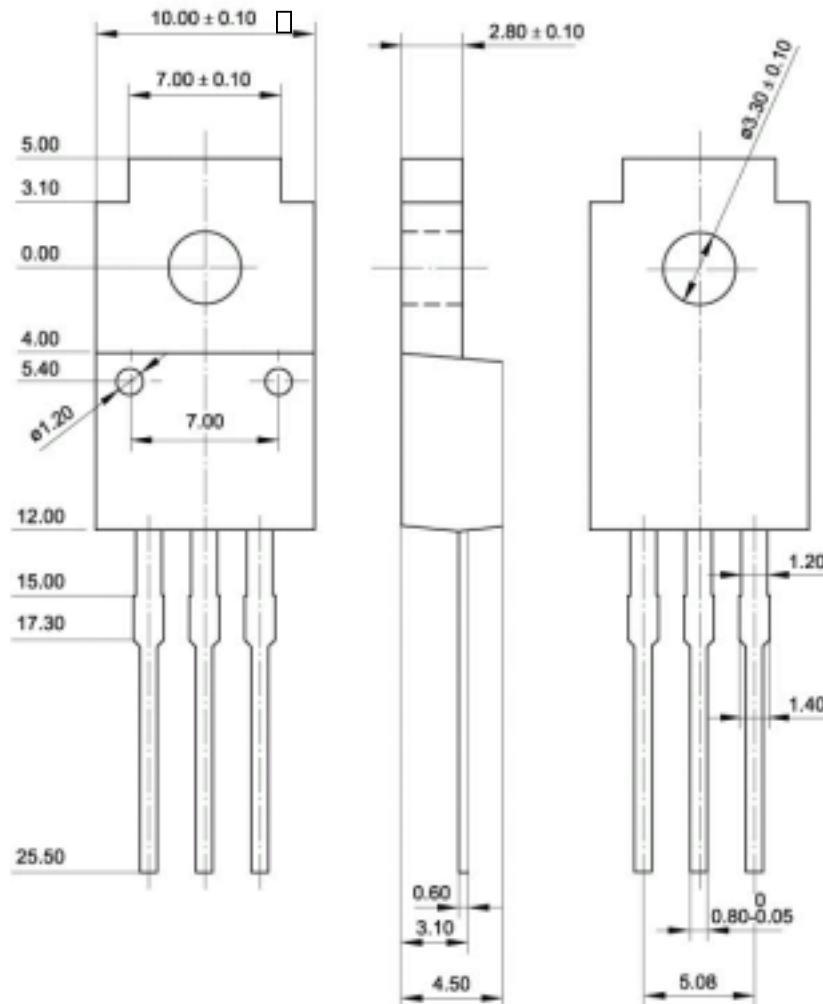


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)