

Silicon NPN Power Transistors

2SD1855

DESCRIPTION

- With TO-220Fa package
- Complement to type 2SB1335
- Low collector saturation voltage

APPLICATIONS

- For low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

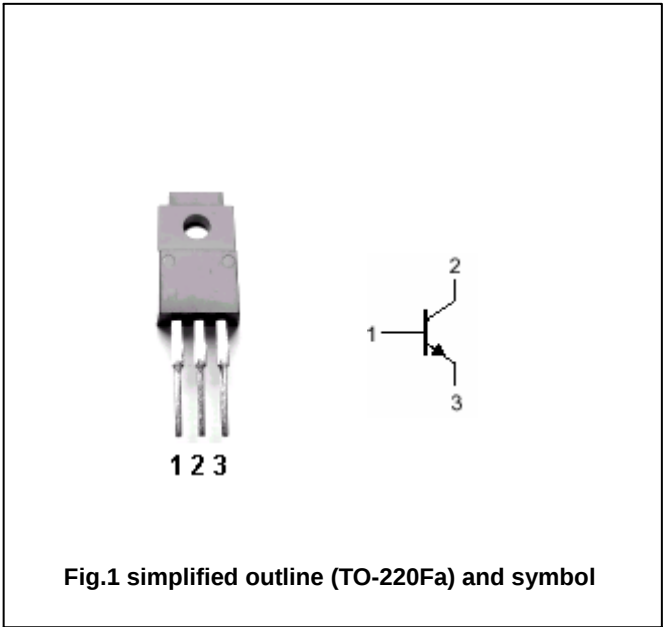


Fig.1 simplified outline (TO-220Fa) and symbol

Absolute maximum ratings(Ta=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	6	V
I _C	Collector current		4	A
P _C	Collector power dissipation	T _C =25	30	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 _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA; I _B =0	60			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =50 μA; I _E =0	80			V
V _{(BR)EBO}	Collector-emitter breakdown voltage	I _E =50 μA; I _C =0	6			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =0.3A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A; I _B =0.3A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =80V; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =6V; I _C =0			10	μA
h _{FE}	DC current gain	I _C =1A; V _{CE} =5V	60		320	
f _T	Transition frequency	I _C =0.5A; V _{CE} =5V		8		MHz
C _{OB}	Collector output capacitance	f=1MHz; V _{CB} =10V		90		pF

◆ h_{FE} Classifications

D	E	F
60-120	100-200	160-320

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PACKAGE OUTLINE

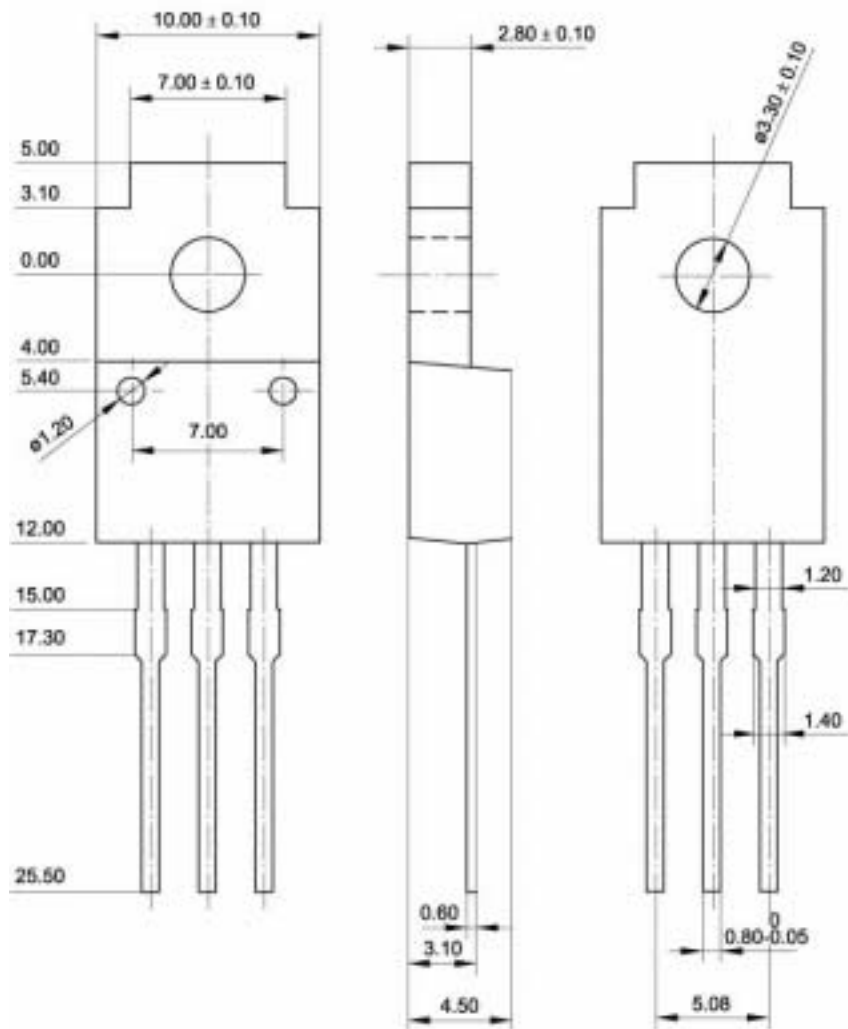


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)