

Silicon NPN Power Transistors

2SD1855

DESCRIPTION

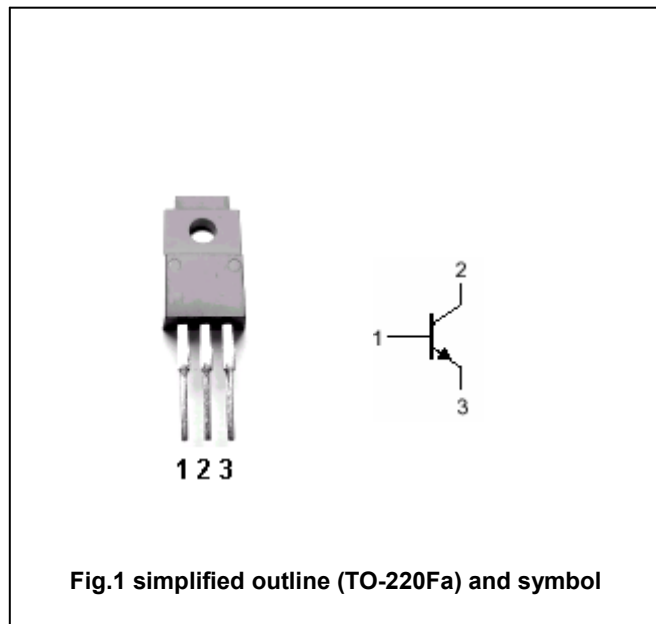
- With TO-220Fa package
- Complement to type 2SB1335
- Low collector saturation voltage

APPLICATIONS

- For low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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	6	V
I_C	Collector current		4	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	30	W
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	$I_C=1mA; I_B=0$	60			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=50\mu A; I_E=0$	80			V
$V_{(BR)EBO}$	Collector-emitter breakdown voltage	$I_E=50\mu A; I_C=0$	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

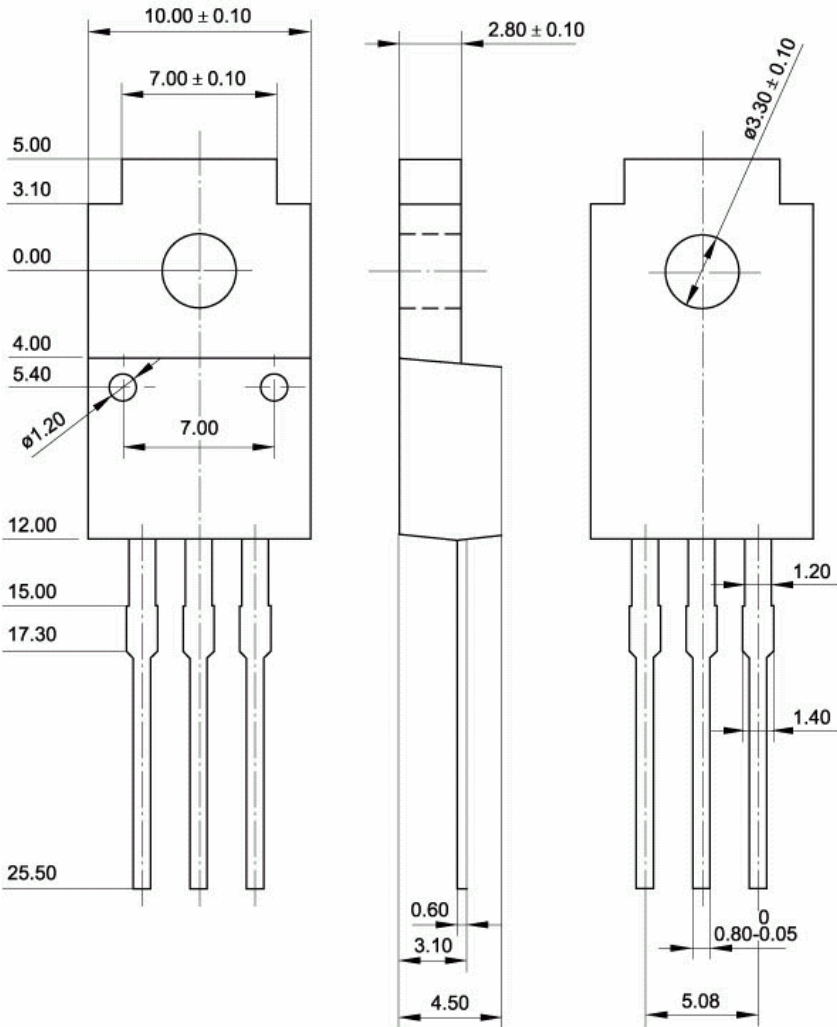


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)