

Silicon NPN Power Transistors

2SD2025

DESCRIPTION

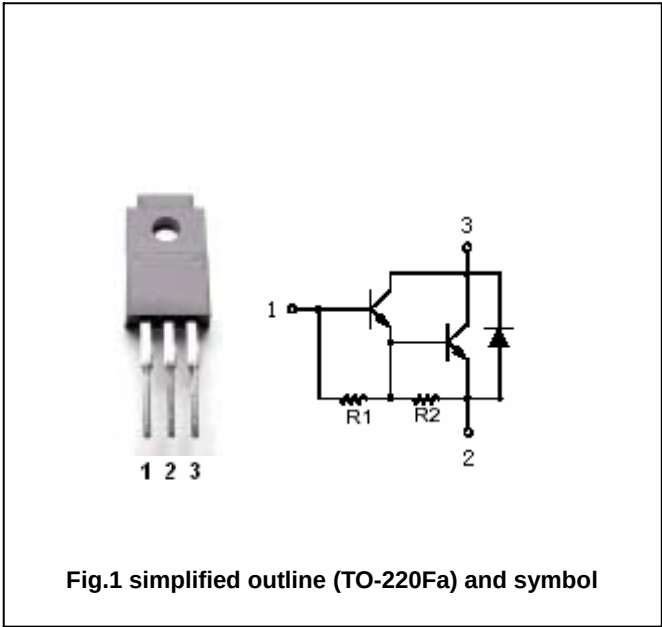
- With TO-220Fa package
- High DC current gain
- Low saturation voltage
- DARLINGTON
- Complement to type 2SB1344

APPLICATIONS

- For low frequency power amplifier and power driver applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	100	V
V _{CEO}	Collector -emitter voltage	Open base	100	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		8	A
I _{CM}	Collector current-peak		10	A
P _C	Collector power dissipation	T _a =25°C	2	W
		T _C =25°C	30	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°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	$I_C=5mA; I_B=0$	100			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=50\mu A; I_E=0$	100			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=3A; I_B=6mA$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=100V; I_E=0$			10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V; I_C=0$			3.0	mA
h_{FE}	DC current gain	$I_C=2A; V_{CE}=3V$	1000		20000	
f_T	Transition frequency	$I_C=0.2A; V_{CE}=5V$		40		MHz
C_{OB}	Output capacitance	$I_E=0; V_{CB}=10V; f=1MHz$		50		pF

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PACKAGE OUTLINE

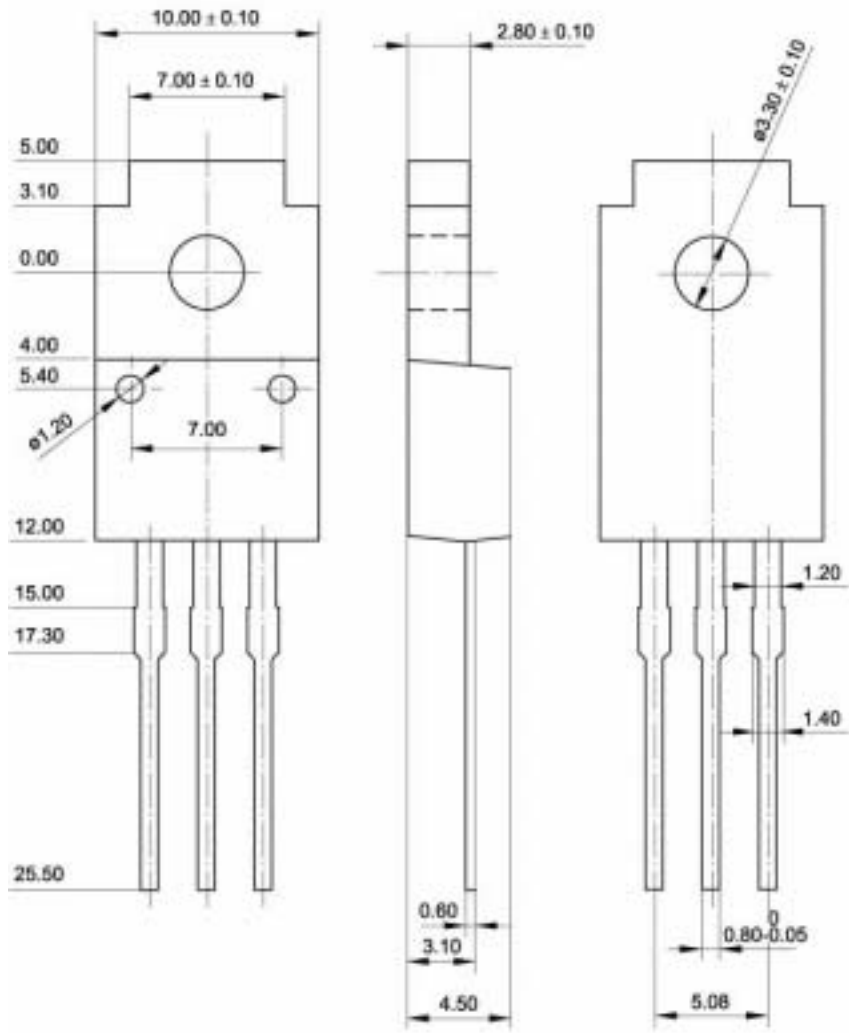


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)