

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

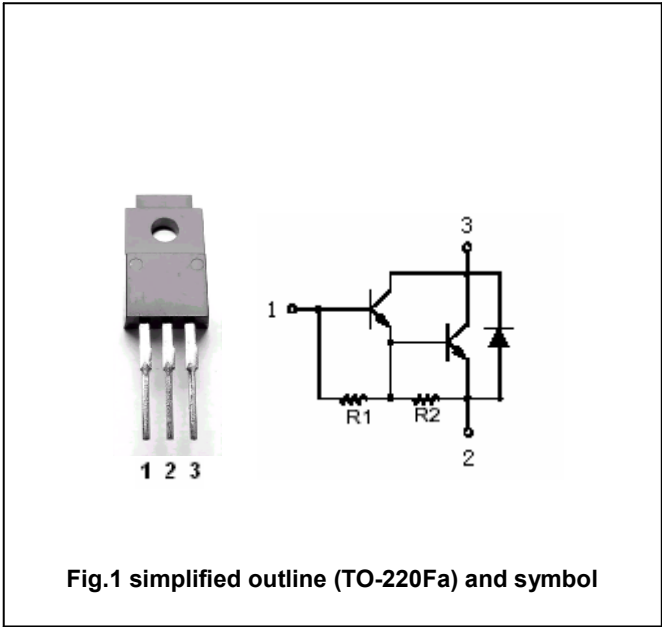


Fig.1 simplified outline (TO-220Fa) and symbol

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

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	$T_a=25^{\circ}\text{C}$	2	W
		$T_C=25^{\circ}\text{C}$	30	
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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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 =5mA; I _B =0	100			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =50μA; 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

