

Silicon NPN Power Transistors

2SD1889

DESCRIPTION

- With TO-220Fa package
- DARLINGTON
- Complement to type 2SB1340
- High DC current gain

APPLICATIONS

- Low frequency power amplification

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

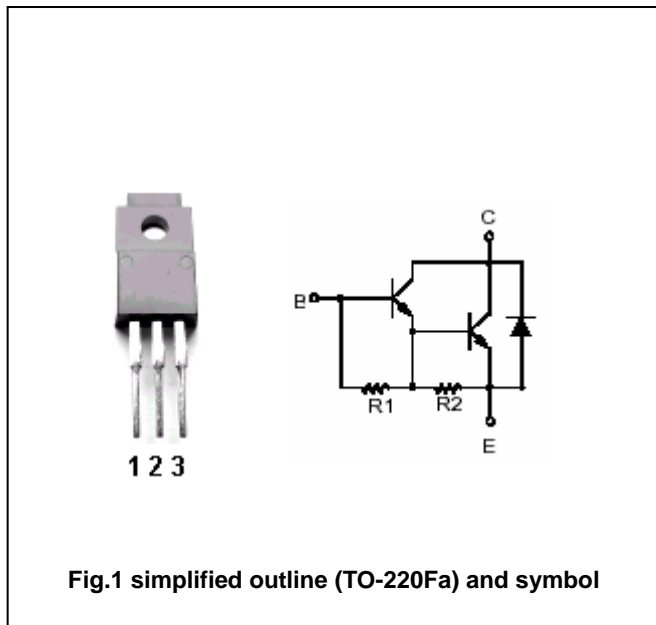


Fig.1 simplified outline (TO-220Fa) and symbol

Absolute maximum ratings(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	120	V
V_{CEO}	Collector -emitter voltage	Open base	120	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		6	A
I_{CM}	Collector current-peak		10	A
P_C	Collector power dissipation	$T_C=25$	30	W
		$T_a=25$	2	
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)CBO}	Collector-base breakdown voltage	I _C =50 μA; I _E =0	120			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =5mA; I _B =0	120			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =6mA			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =120V; I _E =0			100	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	2000		20000	
f _T	Transition frequency	I _E =-0.2A; V _{CE} =5V; f=10MHz		40		MHz
C _{OB}	Output capacitance	I _E =0; V _{CB} =10V; f=1MHz		50		pF

PACKAGE OUTLINE

