

Silicon PNP Power Transistors

2SB1390

DESCRIPTION

- With TO-220Fa package
- High DC current gain
- Low saturation voltage
- DARLINGTON

APPLICATIONS

- For use in low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

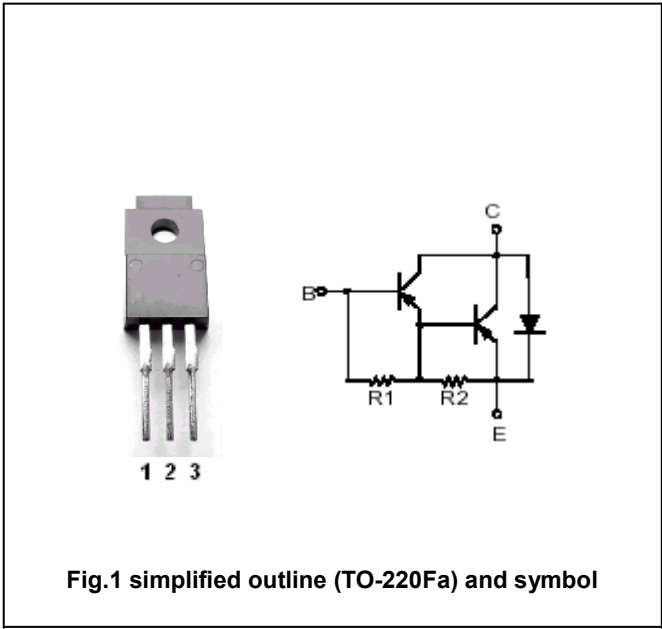


Fig.1 simplified outline (TO-220Fa) and symbol

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-60	V
V_{CEO}	Collector -emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-8	A
I_{CM}	Collector current-peak		-12	A
P_C	Collector power dissipation	$T_a=25^{\circ}\text{C}$	2	W
		$T_C=25^{\circ}\text{C}$	25	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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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	$I_C=-25mA$; $R_{BE}=\infty$	-60			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-100\mu A$; $I_E=0$	-60			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-50mA$; $I_C=0$	-7			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	$I_C=-4A$; $I_B=-8mA$			-1.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C=-8A$; $I_B=-80mA$			-3.0	V
$V_{BEsat-1}$	Base-emitter saturation voltage	$I_C=-4A$; $I_B=-8mA$			-2.0	V
$V_{BEsat-2}$	Base-emitter saturation voltage	$I_C=-8A$; $I_B=-80mA$			-3.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=-50V$; $I_E=0$			-10	μA
I_{CEO}	Collector cut-off current	$V_{CE}=-50V$; $R_{BE}=\infty$			-10	μA
h_{FE}	DC current gain	$I_C=-4A$; $V_{CE}=-3V$	1000		20000	
V_D	Diode forward voltage	$I_D=8A$			3.0	V

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PACKAGE OUTLINE

