

Silicon PNP Power Transistors

2SB1389

DESCRIPTION

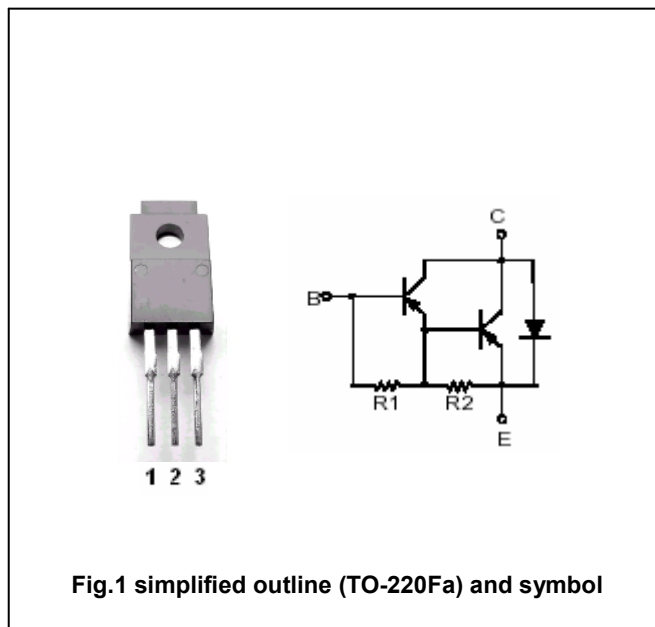
- With TO-220Fa package
- High DC current gain
- Low saturation voltage
- DARLINGTON

APPLICATIONS

- For use in low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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

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		-4	A
I_{CM}	Collector current-peak		-8	A
P_C	Collector power dissipation	$T_a=25$	2	W
		$T_C=25$	25	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

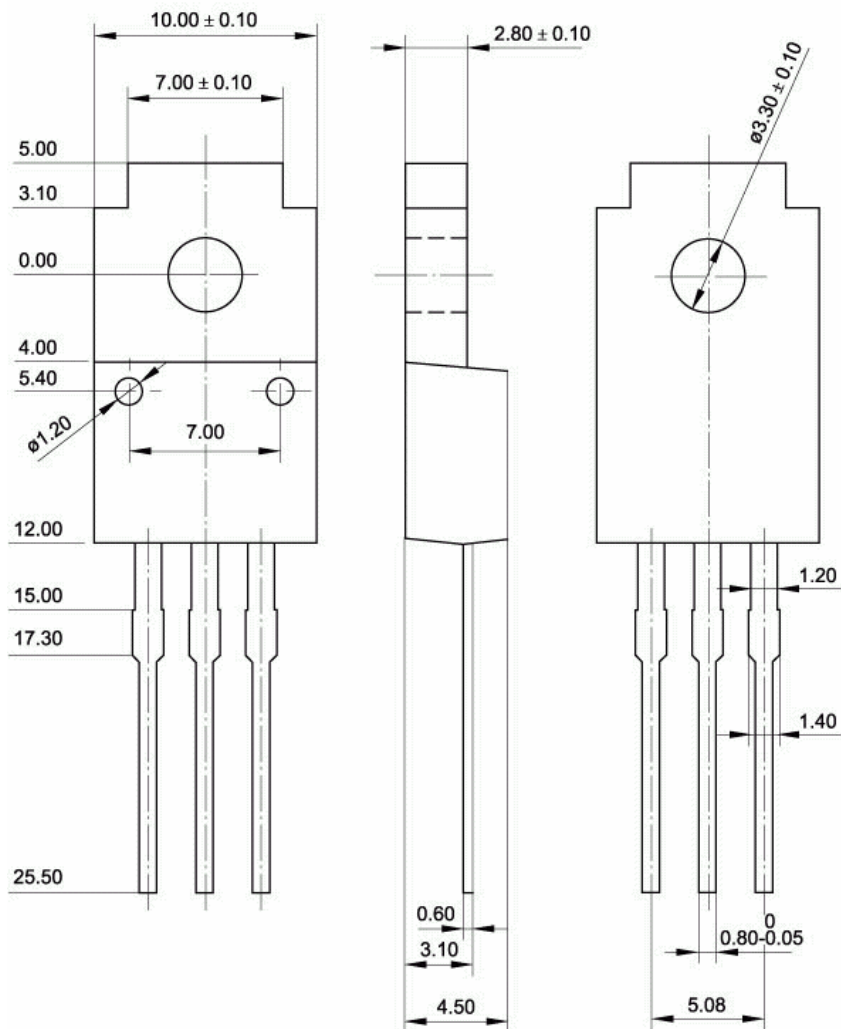
Tj=25 unless otherwise specified

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	$I_C = -2A$; $I_B = -4mA$			-1.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C = -4A$; $I_B = -40mA$			-3.0	V
$V_{BEsat-1}$	Base-emitter saturation voltage	$I_C = -2A$; $I_B = -4mA$			-2.0	V
$V_{BEsat-2}$	Base-emitter saturation voltage	$I_C = -4A$; $I_B = -40mA$			-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	$I_C = -2A$; $V_{CE} = -3V$	1000		20000	
V_D	Diode forward voltage	$I_D = 4A$			3.0	V

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PACKAGE OUTLINE

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