

Silicon PNP Power Transistors

2SA1306 2SA1306A 2SA1306B

DESCRIPTION

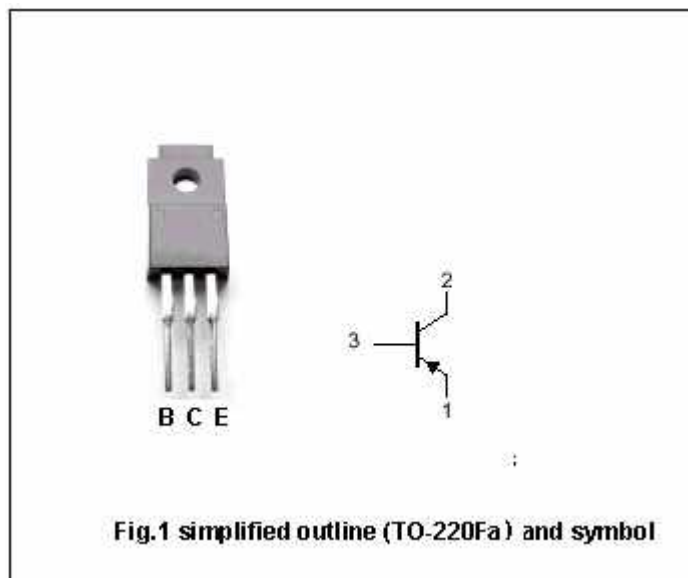
- With TO-220Fa package
- Complement to type
2SC3298,2SC3298A,2SC3298B

APPLICATIONS

- Power amplifier applications
- Driver stage amplifier applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

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

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SA1306	Open emitter	-160	V
		2SA1306A		-180	
		2SA1306B		-200	
V_{CEO}	Collector-emitter voltage	2SA1306	Open base	-160	V
		2SA1306A		-180	
		2SA1306B		-200	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-1.5	A
I_B	Base current			-0.15	A
P_C	Collector power dissipation		$T_C=25^\circ\text{C}$	20	W
T_j	Junction temperature			150	$^\circ\text{C}$
T_{stg}	Storage temperature			-55~150	$^\circ\text{C}$

Silicon PNP Power Transistors**2SA1306 2SA1306A 2SA1306B****CHARACTERISTICS****T_j=25℃ unless otherwise specified**

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	2SA1306	$I_C=10mA, I_B=0$	-160			V
		2SA1306A		-180			
		2SA1306B		-200			
V_{CEsat}	Collector-emitter saturation voltage		$I_C=-0.5A, I_B=-50mA$			-1.5	V
V_{BE}	Base-emitter voltage		$I_C=-0.5A, V_{CE}=-5V$			-1.0	V
I_{CBO}	Collector cut-off current		$V_{CB}=-160V, I_E=0$			-1.0	μA
I_{EBO}	Emitter cut-off current		$V_{EB}=-5V, I_C=0$			-1.0	μA
h_{FE}	DC current gain		$I_C=-0.1A; V_{CE}=-5V$	70		240	
C_{ob}	Output capacitance		$I_E=0; V_{CB}=-10V, f=1MHz$		30		pF
f_T	Transition frequency		$I_C=-0.1A; V_{CE}=-10V$		100		MHz

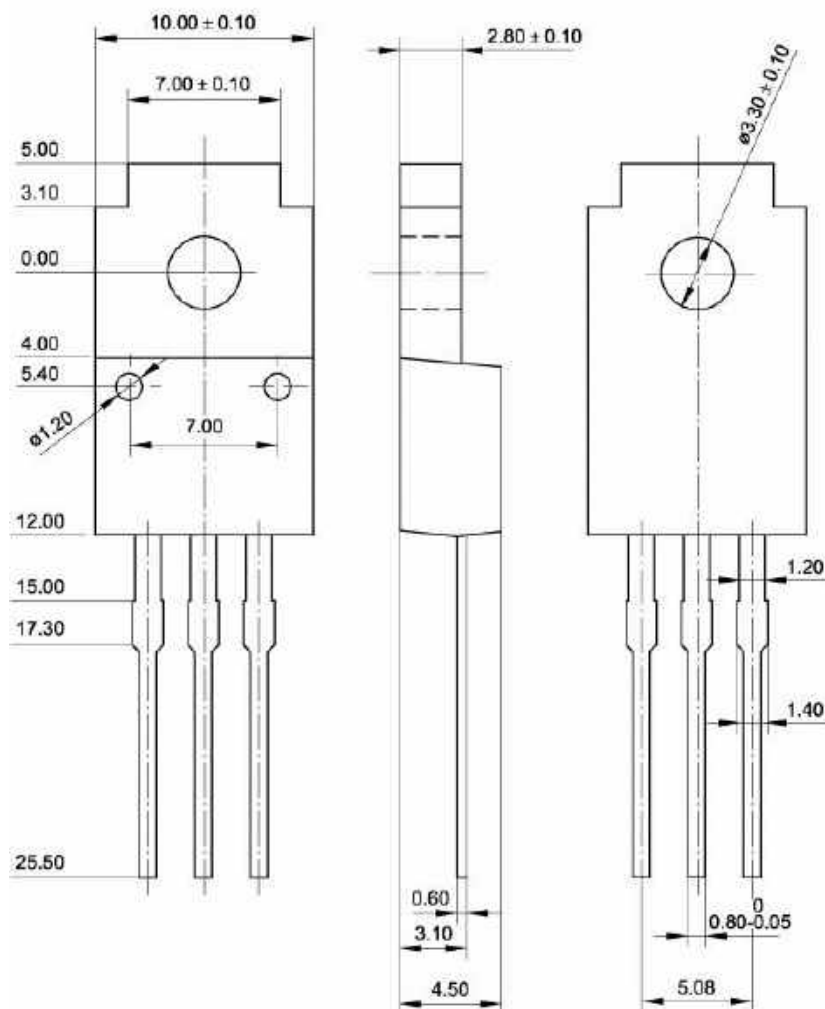
◆ h_{FE} Classifications

O	Y
70-140	120-240

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PACKAGE OUTLINE

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