

Silicon NPN Power Transistors

2SD1772 2SD1772A

DESCRIPTION

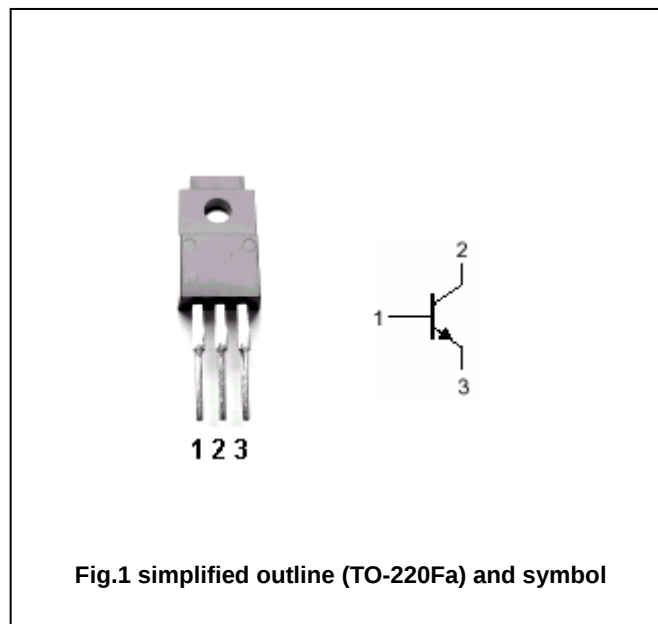
- With TO-220Fa package
- Complement to type 2SB1192/1192A
- Large collector power dissipation

APPLICATIONS

- For power amplification
- For TV vertical deflection output

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



ABSOLUTE MAXIMUM RATINGS AT Ta=25

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage		Open emitter	200	V
V_{CEO}	Collector-emitter voltage	2SD1772	Open base	150	V
		2SD1772A		180	
V_{EBO}	Emitter-base voltage		Open collector	6	V
I_C	Collector current (DC)			1	A
I_{CM}	Collector current-peak			2	A
P_C	Collector power dissipation		$T_C=25$	25	W
			$T_a=25$	2	
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	2SD1772	$I_C=5mA, I_B=0$	150			V
		2SD1772A		180			
$V_{(BR)EBO}$	Emitter-base breakdown voltage		$I_E=0.5mA, I_C=0$	6			V
V_{CEsat}	Collector-emitter saturation voltage		$I_C=500mA; I_B=50mA$			1.0	V
V_{BE}	Base-emitter on voltage		$I_C=300mA; V_{CE}=10V$			1.0	V
I_{CBO}	Collector cut-off current		$V_{CB}=200V; I_E=0$			50	μA
I_{EBO}	Emitter cut-off current		$V_{EB}=4V; I_C=0$			50	μA
h_{FE-1}	DC current gain		$I_C=100mA; V_{CE}=10V$	60		240	
h_{FE-2}	DC current gain		$I_C=300mA; V_{CE}=10V$	50			
C_{OB}	Output capacitance		$I_E=0; V_{CB}=10V; f=1MHz$		27		pF
f_T	Transition frequency		$I_C=100mA; V_{CE}=10V; f=1MHz$		20		MHz

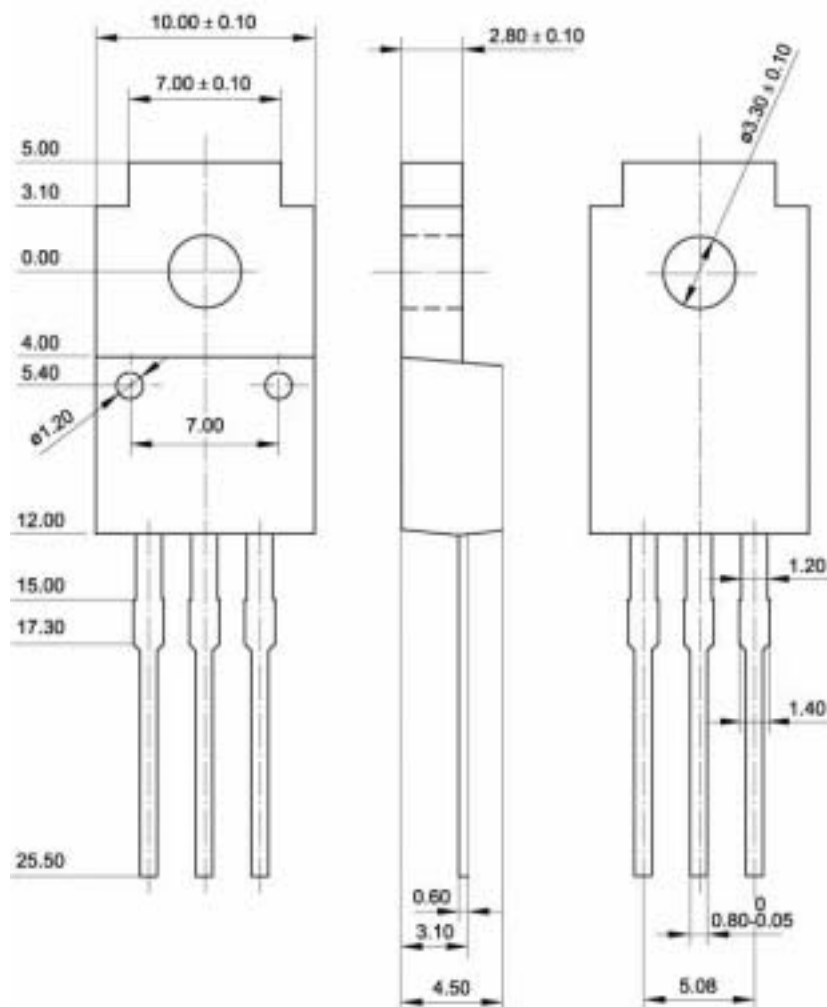
◆ h_{FE-1} Classifications

Q	P
60-140	100-240

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PACKAGE OUTLINE

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

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