Silicon NPN Power Transistors 2SC1683

DESCRIPTION

- With TO-220C package
- Complement to type 2SA843
- High breakdown voltage
- Large collector power dissipation

APPLICATIONS

- Audio frequency power amplifier
- Color TV vertical deflection output

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

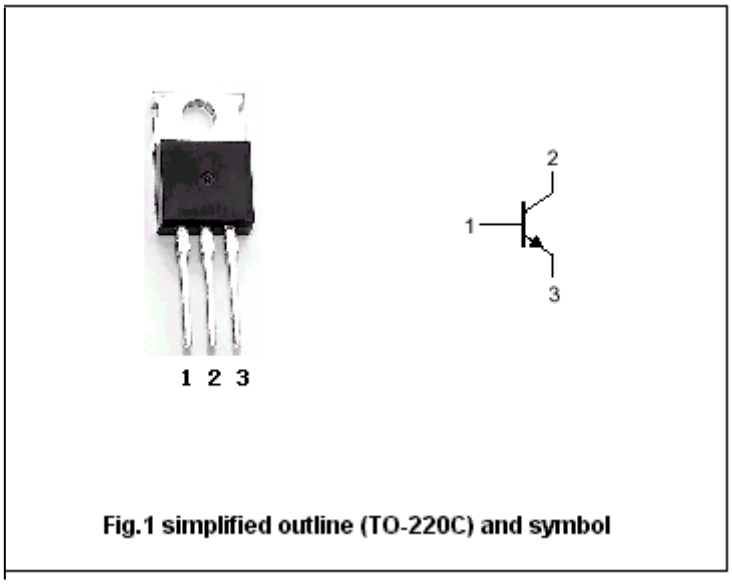


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	200	V
V_{CEO}	Collector-emitter voltage	Open base	150	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		500	mA
I_{CM}	Collector current-peak		2	A
P_T	Total power dissipation	T_C=25℃	20	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-50~150	℃

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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=5mA ; I_B=0	150			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=0.5mA ; I_E=0	200			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=0.5mA ; I_C=0	5			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=500mA; I_B=50mA			1.0	V
V_{BE}	Base-emitter on voltage	I_C=400m A ; V_{CE}=10V			1.0	V
I_{CBO}	Collector cut-off current	V_{CB}=200V ;I_E=0			50	μ A
I_{EBO}	Emitter cut-off current	V_{EB}=4V; I_C=0			50	μ A
h_{FE}	DC current gain	I_C=400m A ; V_{CE}=10V	60		200	

◆ **h_{FE} Classifications**

P	Q
60-140	85-200

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PACKAGE OUTLINE

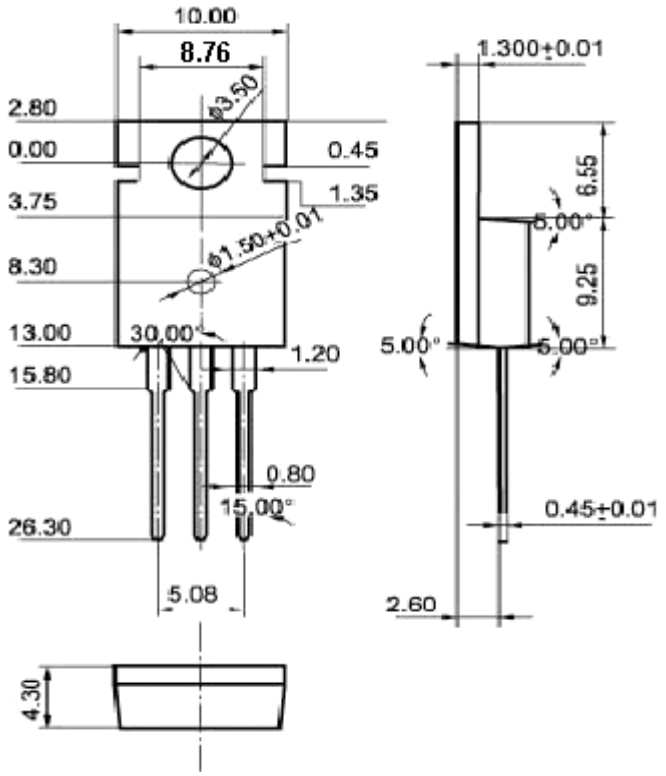


Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)