

Silicon NPN Power Transistors

2SC1755

DESCRIPTION

- With TO-220 package
- High breakdown voltage

APPLICATIONS

- For TV chroma, video, audio output applications

PINNING

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

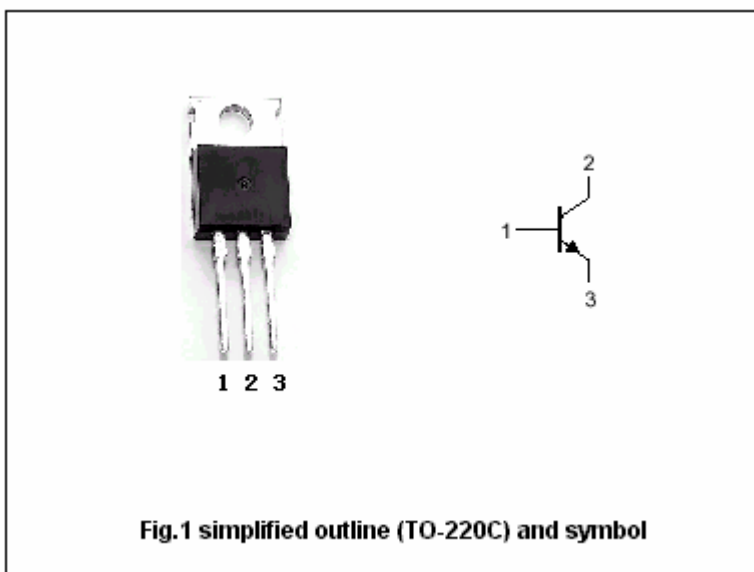


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	300	V
V_{CEO}	Collector-emitter voltage	Open base	300	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current (DC)		0.2	A
I_{CM}	Collector current-peak		0.7	A
P_C	Collector power dissipation	$T_a=25$	1.2	W
		$T_C=25$	15	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-40~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA ; I _B =0	300			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =50mA ; I _B =5mA			2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =200V ; I _E =0			0.1	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			0.1	μA
h _{FE}	DC current gain	I _C =10mA ; V _{CE} =10V	40		200	
f _T	Transition frequency	I _C =10mA ; V _{CE} =30V	50			MHz
C _{OB}	Collector output capacitance	f=1MHz ; V _{CB} =50V			5.3	pF

◆ h_{FE} classifications

C	D	E
40-80	60-120	100-200

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PACKAGE OUTLINE

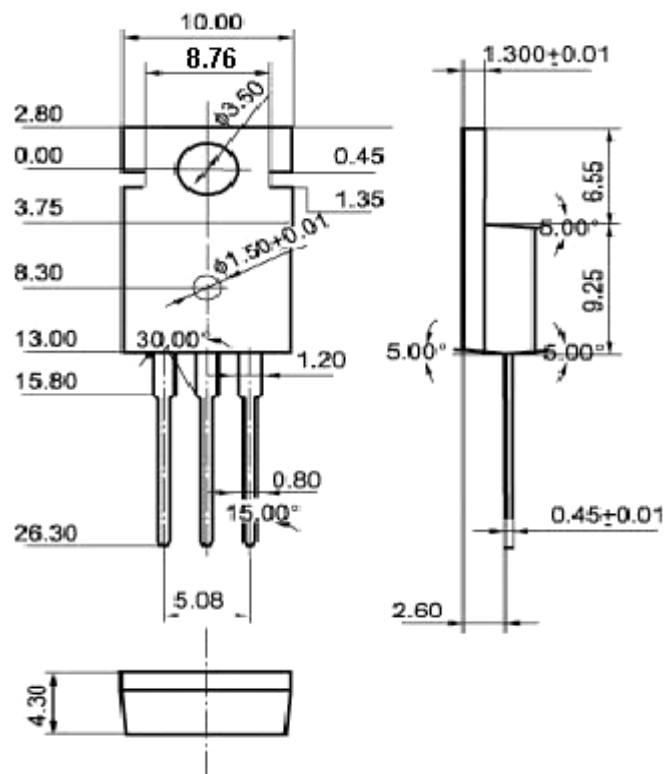


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)

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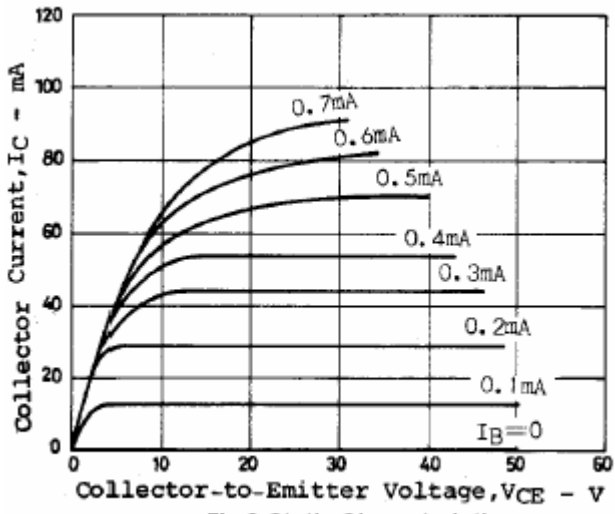


Fig.3 Static Characteristic

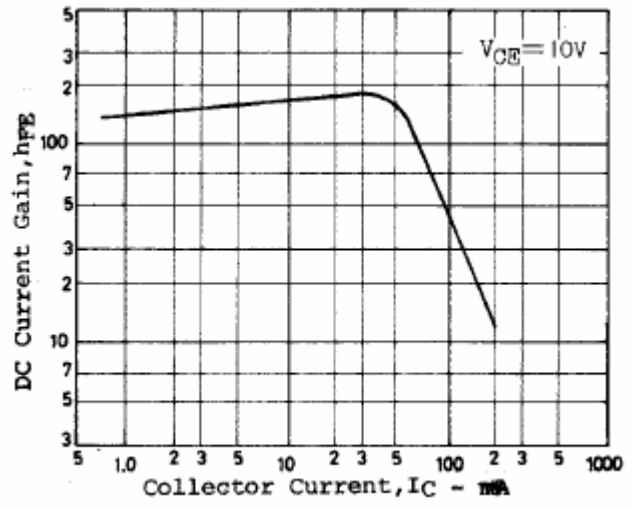


Fig.4 DC current Gain

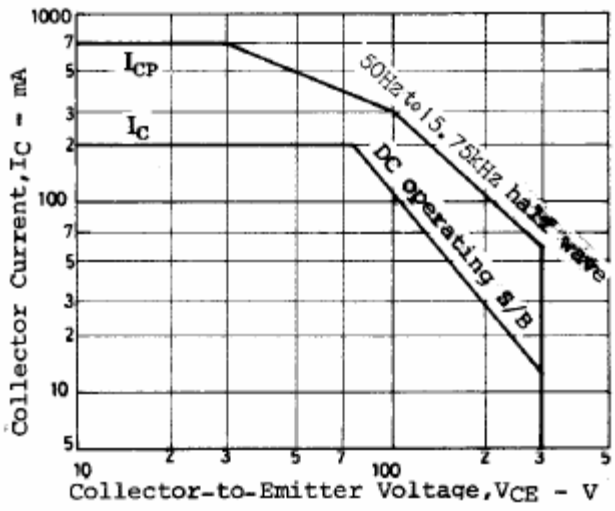


Fig.5 Safe Operating Area