

Silicon NPN Power Transistors

2SC1755

DESCRIPTION

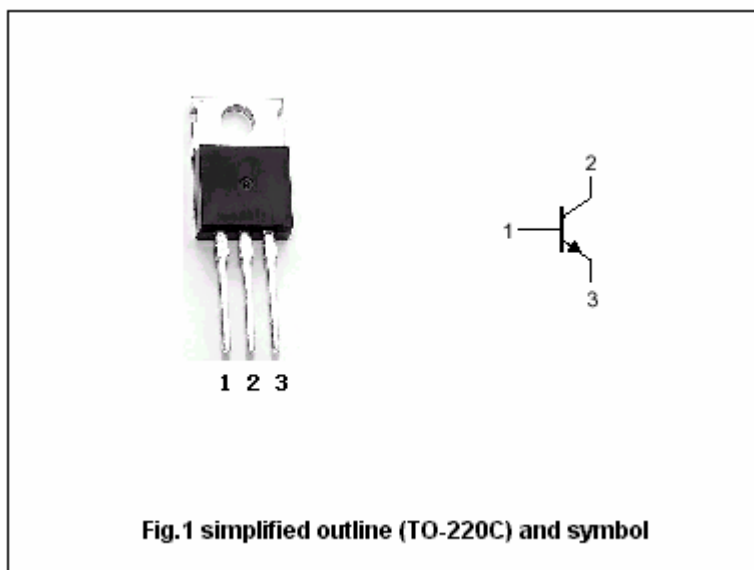
- With TO-220 package
- High breakdown voltage

APPLICATIONS

- For TV chroma, video ,audio output applications

PINNING

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



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	$T_a=25^{\circ}\text{C}$	1.2	W
		$T_C=25^{\circ}\text{C}$	15	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-40~150	℃

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CHARACTERISTICS

Tj=25°C 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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Technical drawing of a mechanical part showing outline dimensions. The drawing includes a front view, a side view, and a cross-sectional view. Key dimensions include overall width 10.00, hole diameter 3.50, and various vertical and horizontal offsets. Tolerances are indicated for several dimensions, such as 1.300±0.01 and 0.45±0.01.

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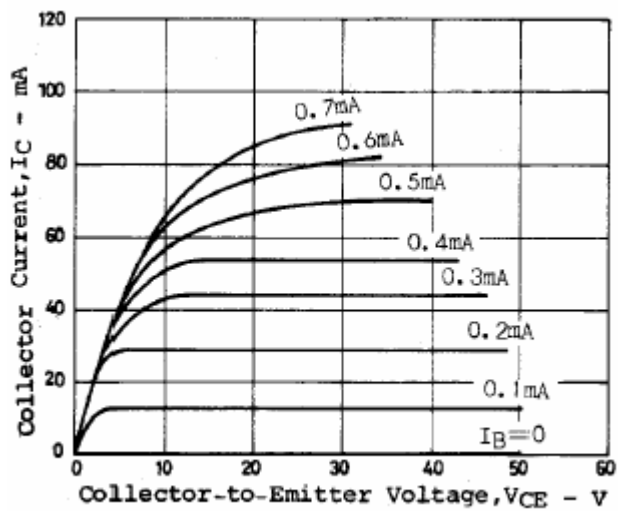


Fig.3 Static Characteristic

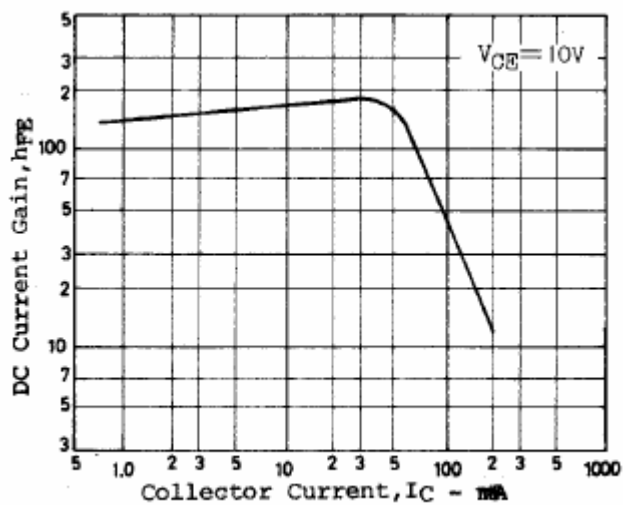


Fig.4 DC current Gain

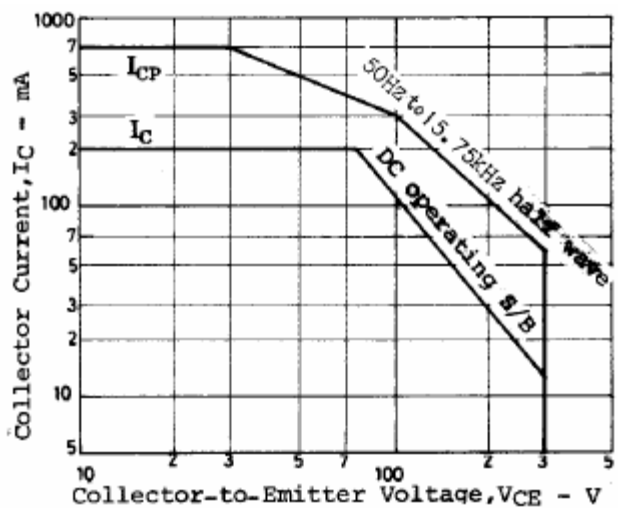


Fig.5 Safe Operating Area