

Silicon NPN Power Transistors

2SC1061

DESCRIPTION

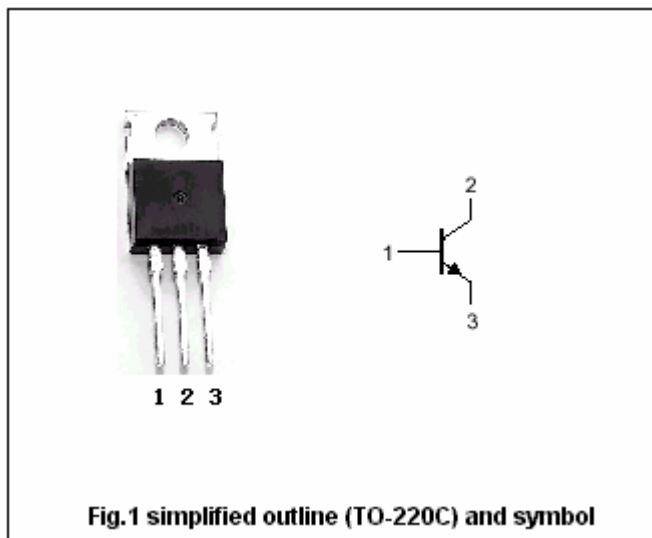
- With TO-220 package
- Low saturation voltage
- Complement to type 2SA671
- Note: type 2SC1060 with short pin

APPLICATIONS

- For use in low frequency power amplifier 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	50	V
V_{CEO}	Collector-emitter voltage	Open base	50	V
V_{EBO}	Emitter-base voltage	Open collector	4	V
I_C	Collector current (DC)		3	A
I_{CM}	Collector current-peak		8	A
I_B	Base current (DC)		0.5	A
P_C	Collector power dissipation	$T_C=25$	25	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-a}$	Thermal resistance from junction to case	5.0	/W

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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 =50mA ; I _B =0	50			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =5mA ; I _E =0	50			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =5mA ; I _C =0	4			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A ; I _B =0.2A			1.0	V
V _{BE}	Base-emitter on voltage	I _C =1A ; V _{CE} =4V			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =25V ; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =4V ; I _C =0			0.1	mA
h _{FE-1}	DC current gain	I _C =0.1A ; V _{CE} =4V	35			
h _{FE-2}	DC current gain	I _C =1A ; V _{CE} =4V	35		320	
f _T	Transition frequency	I _C =0.5A ; V _{CE} =4V	5.0			MHz

◆ h_{FE-2} classifications

A	B	C	D
35-70	60-120	100-200	160-320

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PACKAGE OUTLINE

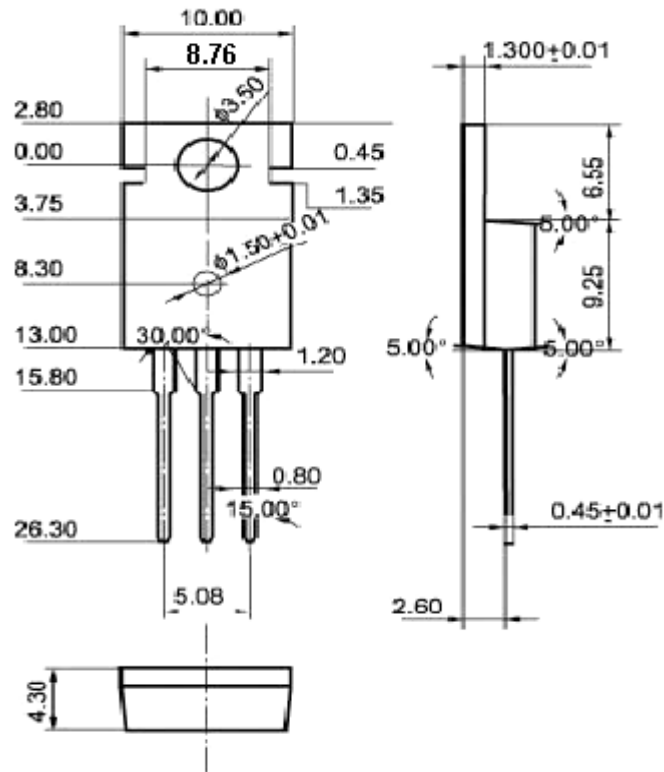


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)

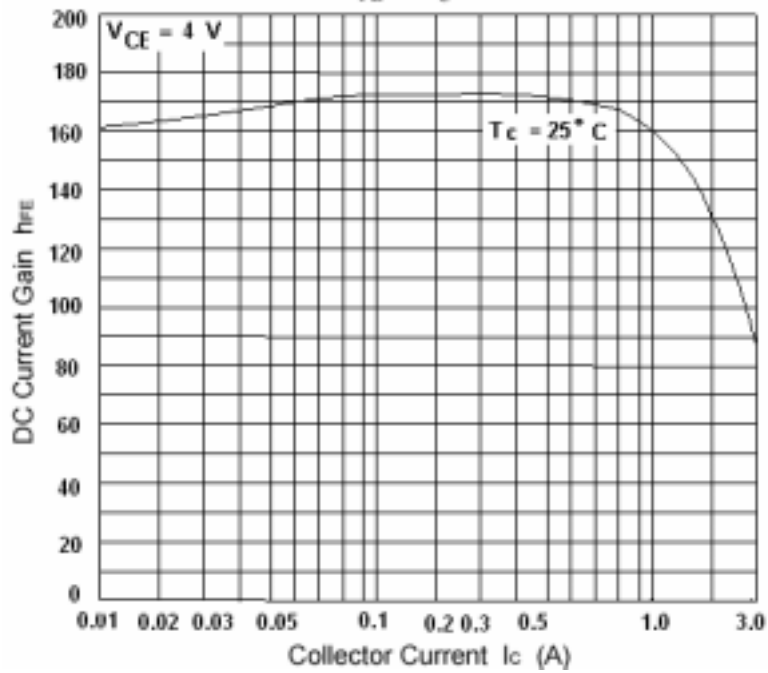


Fig.3 DC current Gain

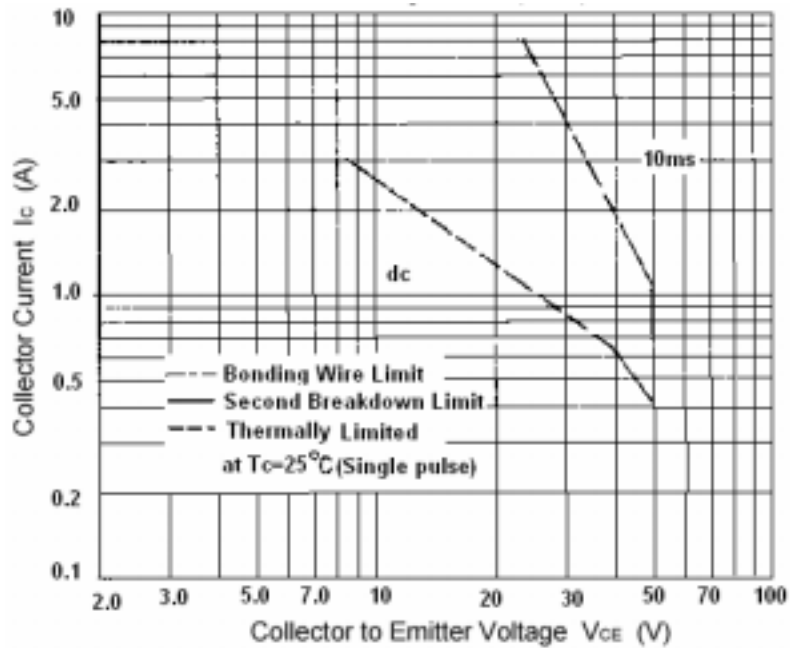


Fig.4 Safe Operating Area