Silicon PNP Power Transistors 2SB834

DESCRIPTION

·With TO-220 package
·Low collector saturation voltage
·Complement to type 2SD880

APPLICATIONS

·Audio frequency power amplifier

PINNING

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

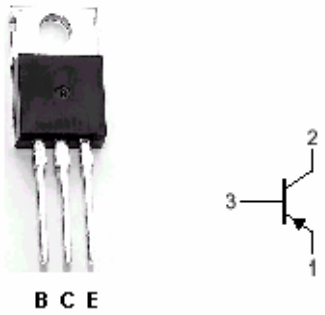

Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings (Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-60	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-3	A
I_B	Base current		-0.5	A
P_C	Collector power dissipation	T_a=25□	1.5	W
		T_C=25□	30	
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	I_C=-50mA ; I_B=0	-60			V
V_{BE}	Base-emitter on voltage	I_C=-0.5A ; V_{CE}=-5V		-0.7	-1.0	V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-3A;I_B=-0.3A		-0.5	-1.0	V
I_{CBO}	Collector cut-off current	V_{CB}=-60V;I_E=0			-0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=-7V; I_C=0			-0.1	mA
h_{FE-1}	DC current gain	I_C=-0.5A ; V_{CE}=-5V	60		200	
h_{FE-2}	DC current gain	I_C=-3A ; V_{CE}=-5V	20			
C_{ob}	Collector output capacitance	I_E=0; V_{CB}=-10V; f=1MHz		150		pF
f_T	Transition frequency	I_C=-0.5A ; V_{CE}=-5V		9		MHz
Switching times						
t_{on}	Turn-on time	V_{CC}=-30V; R_L=15Ω I_{B1}=-I_{B2}=-0.2A		0.4		μs
t_s	Storage time			1.7		μs
t_f	Fall time			0.5		μs

◆ h_{FE-1} classifications

O	Y
60-120	100-200

PACKAGE OUTLINE

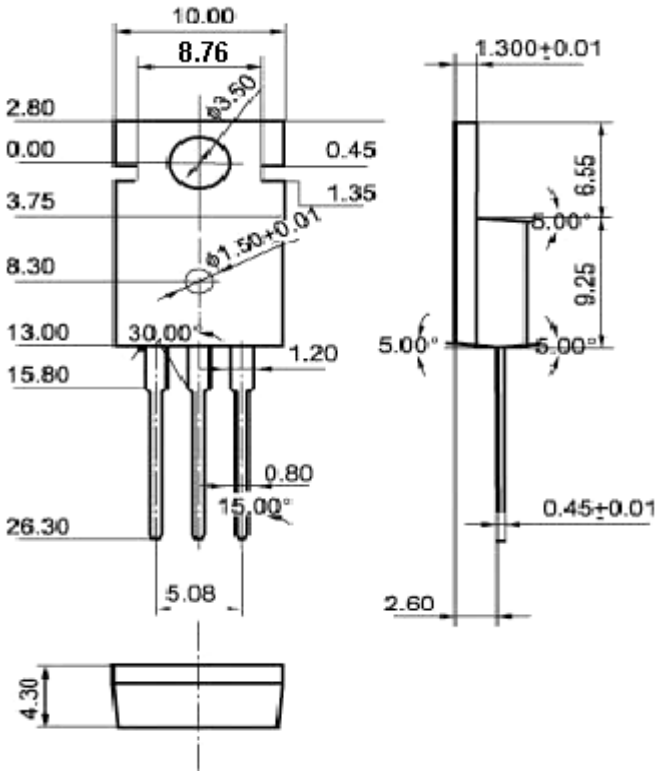

Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)

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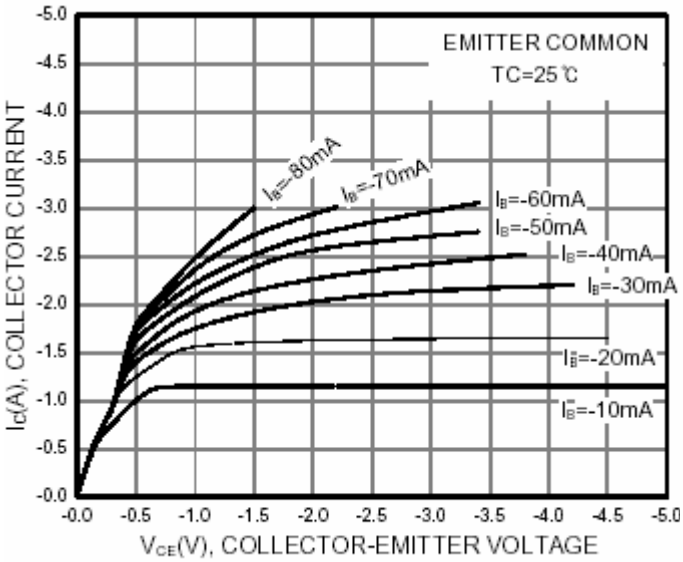

Fig.3 Static Characteristic

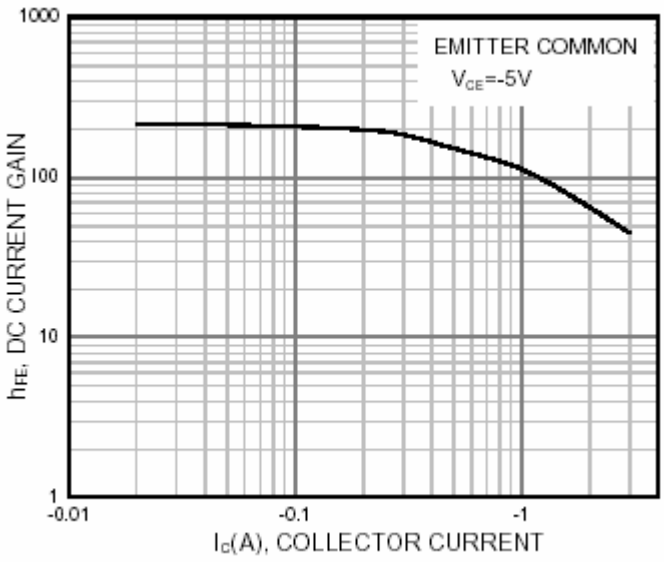

Fig.4 DC current Gain

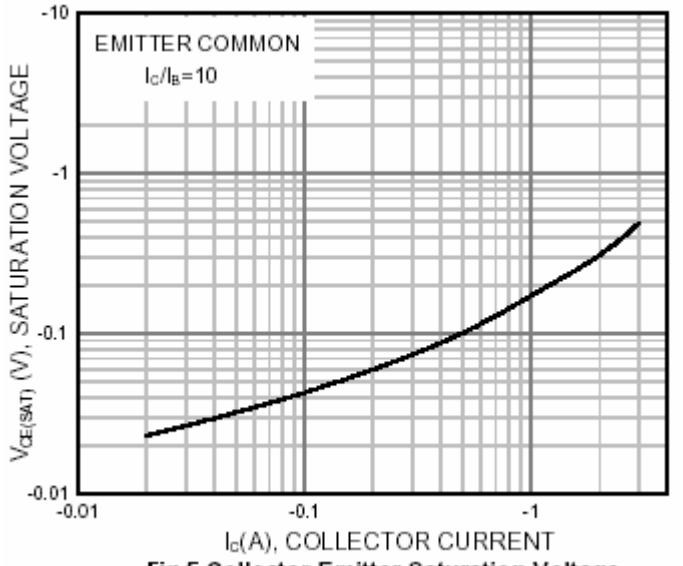

Fig.5 Collector-Emitter Saturation Voltage

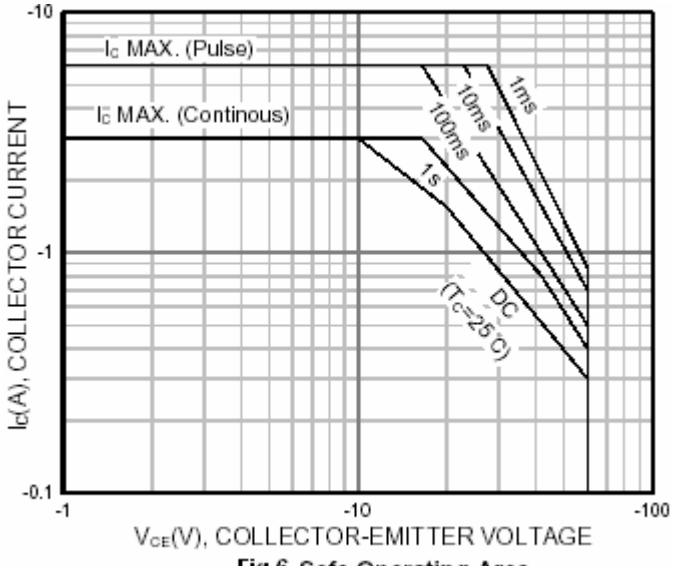

Fig.6 Safe Operating Area

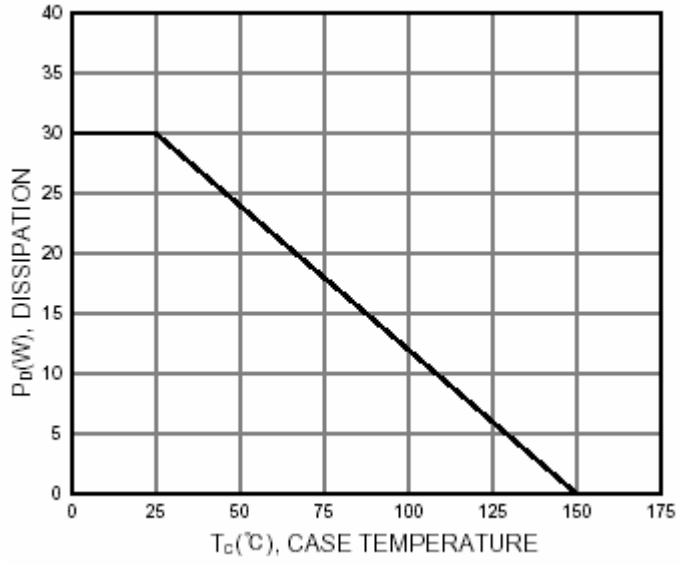

Fig.7 Power Derating