

GESD880

NPN EPITAXIAL PLANAR TRANSISTOR

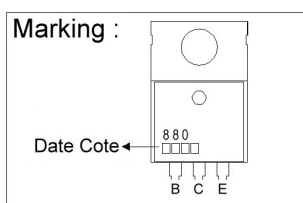
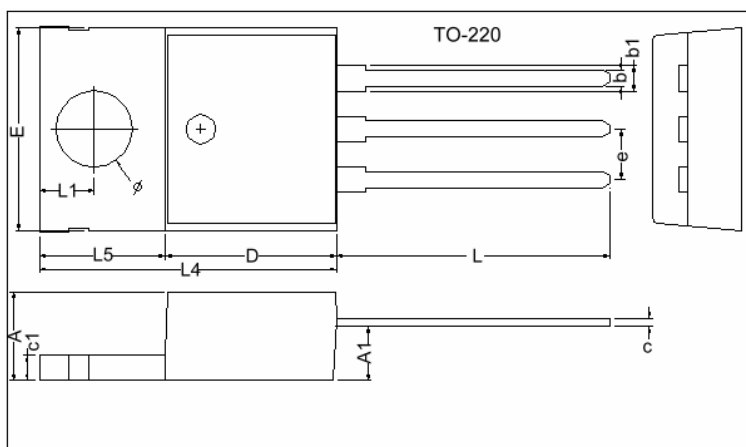
Description

The GESD880 is designed for audio frequency power amplifier application.

Features

- High DC Current Gain: $h_{FE} = 300$ (Max.) @ $V_{CE} = 5V$, $I_C = 0.5A$
- Low Saturation Voltage: $V_{CE(sat)} = 1.0V$ (Max.) @ $I_C = 3A$, $I_B = 0.3A$

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.80	c1	1.25	1.45
b	0.76	1.00	b1	1.17	1.47
c	0.36	0.50	L	13.25	14.25
D	8.60	9.00	e	2.54 REF.	
E	9.80	10.4	L1	2.60	2.89
L4	14.7	15.3	∅	3.71	3.96
L5	6.20	6.60	A1	2.60	2.80

Absolute Maximum Ratings (TA=25°C)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	62	V
Emitter to Base Voltage	V_{EBO}	7	V
Collector Current	I_C	3	A
Collector Power Dissipation (TA=25°C)	P_D	1.5	W
Collector Power Dissipation (TC=25°C)	P_D	25	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

Electrical Characteristics (TA = 25°C unless otherwise noted)

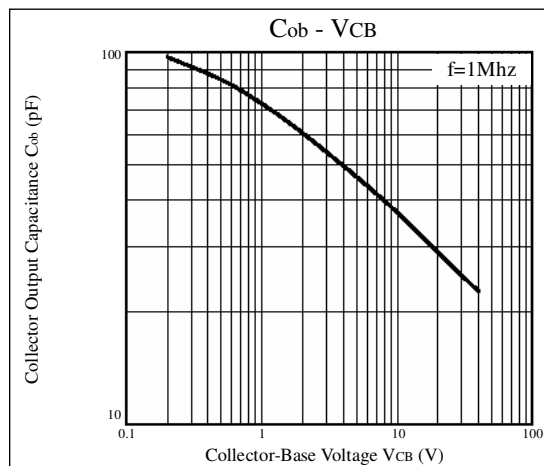
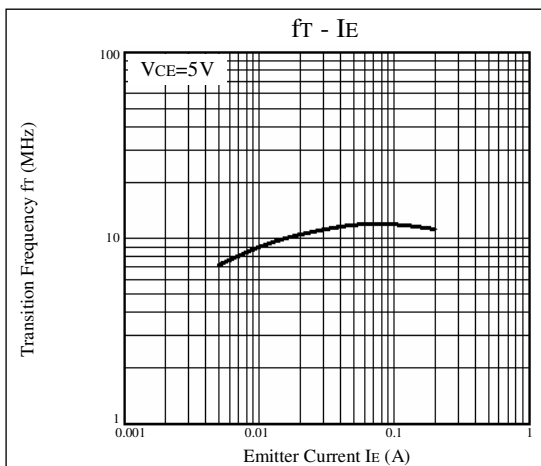
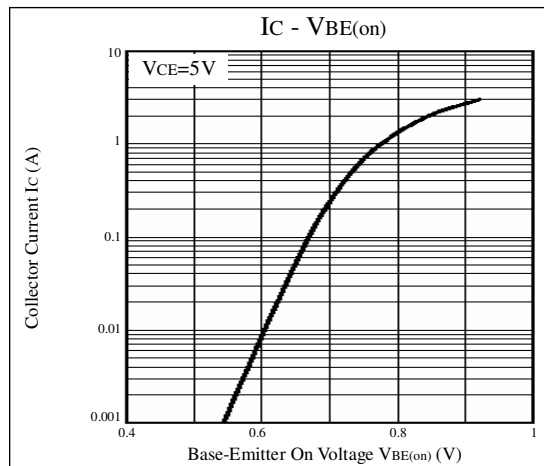
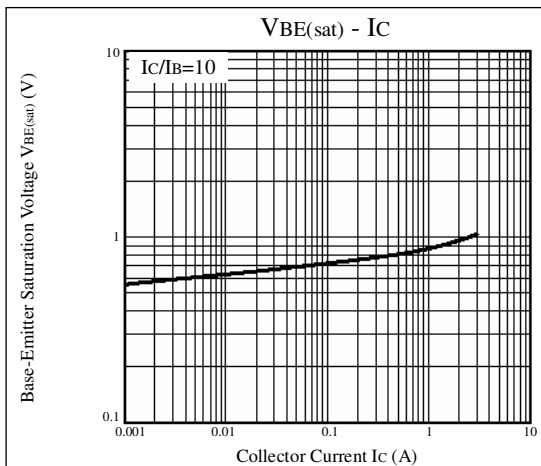
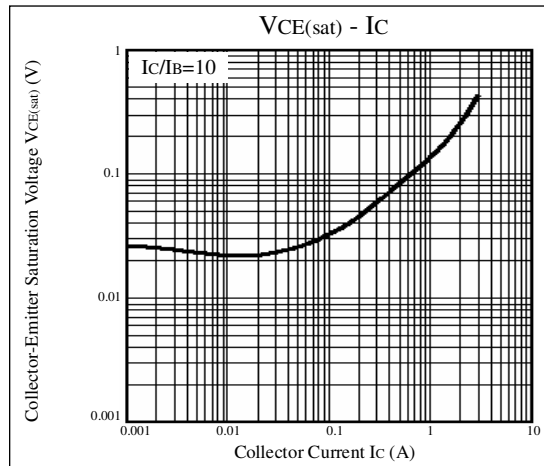
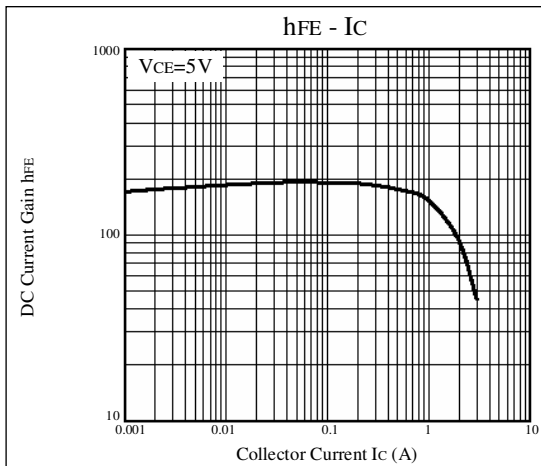
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CBO}	80	-	-	V	$I_C=100\mu A$, $I_E=0$
V_{CEO}	62	-	-	V	$I_C=50mA$, $I_B=0$
V_{EBO}	7	-	-	V	$I_E=100\mu A$, $I_C=0$
I_{CBO}	-	-	10	μA	$V_{CB}=80V$, $I_E=0$
I_{EBO}	-	-	10	μA	$V_{EB}=7V$, $I_C=0$
* $V_{CE(sat)}$	-	-	1.0	V	$I_C=3A$, $I_B=0.3A$
* $V_{BE(sat)}$	-	-	1.5	V	$I_C=2A$, $I_B=0.2A$
* $V_{BE(ON)}$	-	-	1.0	V	$V_{CE}=5V$, $I_C=500mA$
* h_{FE}	60	-	300		$V_{CE}=5V$, $I_C=0.5A$
fT	-	8	-	MHz	$V_{CE}=5V$, $I_E=-0.5A$
Cob	-	40	-	pF	$V_{CB}=10V$, $I_E=0$, $f=1MHz$

*Pulse Test: Pulse Width $\leq 380\mu s$, Duty Cycle $\leq 2\%$

Classification Of hFE

Rank	O	Y	GR
Range	60 ~ 120	100 ~ 200	150 ~ 300

Characteristics Curve



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