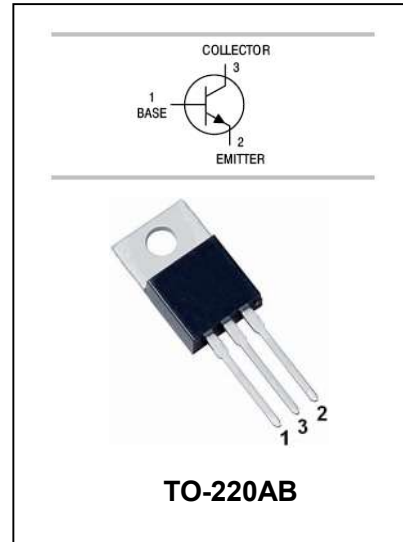


## NPN Epitaxial Silicon Transistor

## 2SD880

### FEATURES

- Low frequency power amplifier.
- Complement to 2SB834.



### Ordering Information

Part Number	Package	Shipping	Marking Code
2SD880□	TO-220AB	50/Tube	2SD880

□: none is for Lead Free package;

“G” is for Halogen Free package.

### MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	60	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current	3	A
$P_C$	Collector Dissipation	1.5	W
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	°C

## NPN Epitaxial Silicon Transistor

## 2SD880

### ELECTRICAL CHARACTERISTICS Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60	-	-	V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	60	-	-	V
Emitter-base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	7	-	-	V
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=60V, I_E=0$	-	-	100	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	100	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=500mA$	60	-	300	-
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3A, I_B=300mA$	-	-	1	V
Base-emitter Voltage	$V_{BE}$	$I_C=0.5A, V_{CE}=5V$	-	-	1	V
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=500mA$	-	3	-	MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	70	-	pF
Turn-on Time	$t_{on}$	$I_C=2A$ $I_{B1}=-I_{B2}=200mA$ $PW=20\mu s$	-	0.8	-	$\mu s$
Storage Time	$t_s$		-	1.5	-	$\mu s$
Fall Time	$t_f$		-	0.8	-	$\mu s$

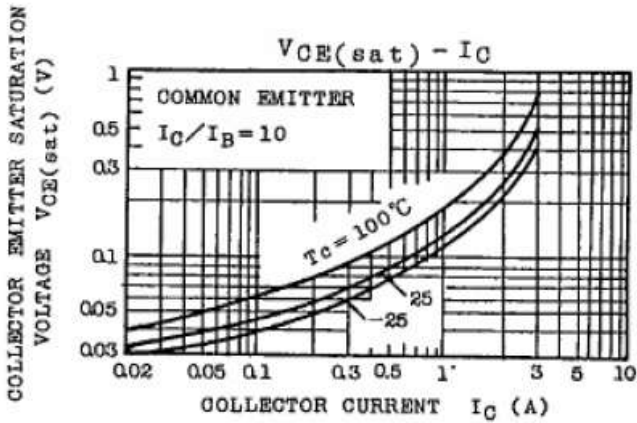
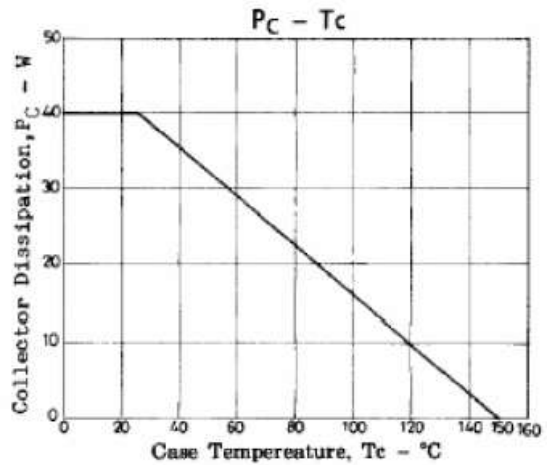
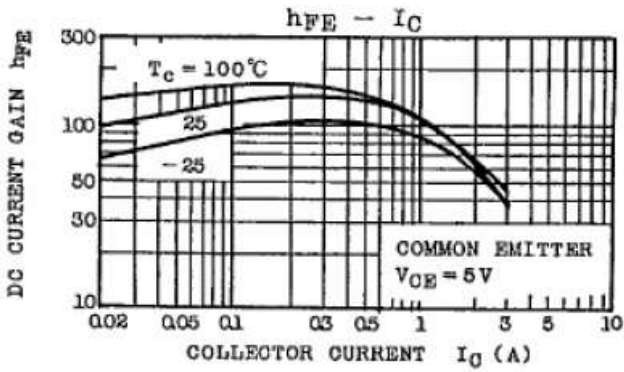
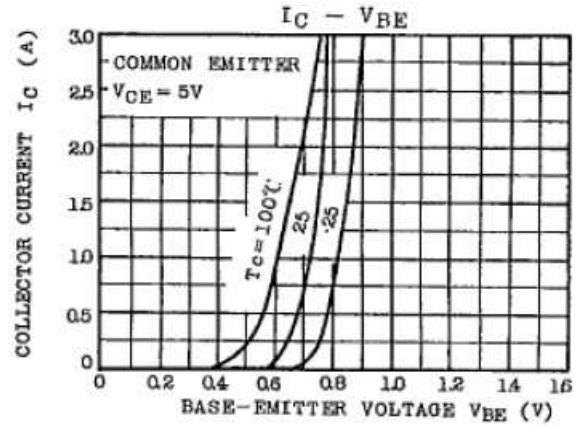
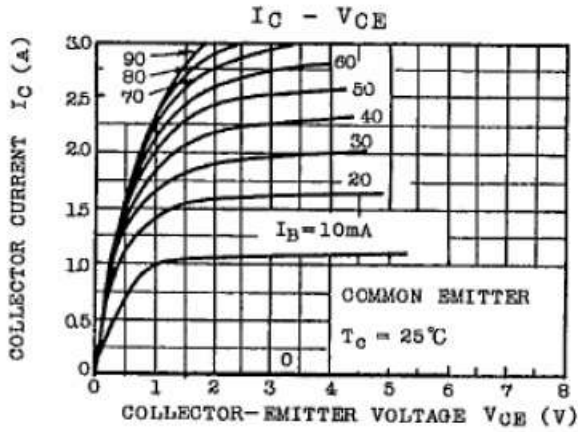
### CLASSIFICATION OF $h_{FE}$

Range	O	Y	GR
Marking	60-120	100-200	150-300

**NPN Epitaxial Silicon Transistor**

**2SD880**

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



## NPN Epitaxial Silicon Transistor

## 2SD880

### PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

