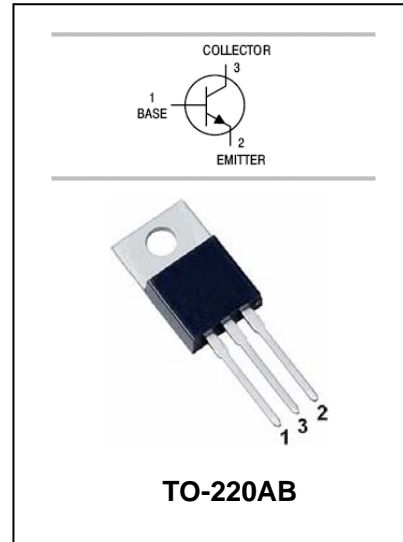


NPN Epitaxial Silicon Transistor

2SD880

FEATURES

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



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 Continuous	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	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=7V, I_C=0$	-	-	100	μA
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	-	μs
Storage Time	t_s		-	1.5	-	μs
Fall Time	t_f		-	0.8	-	μs

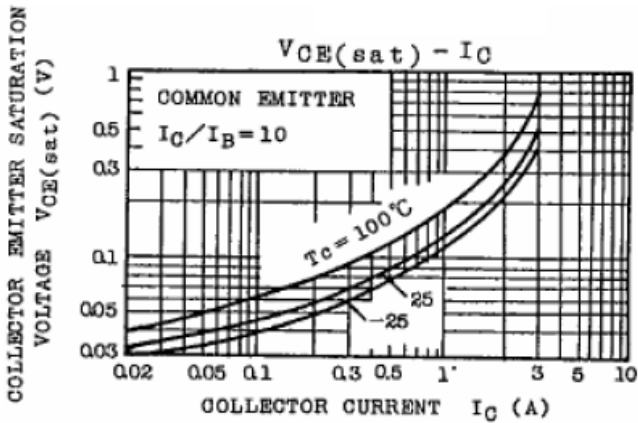
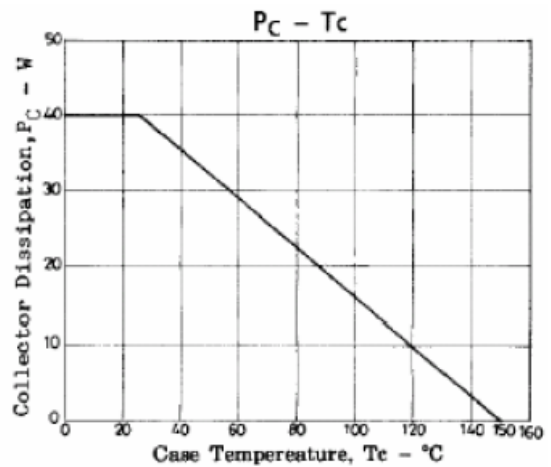
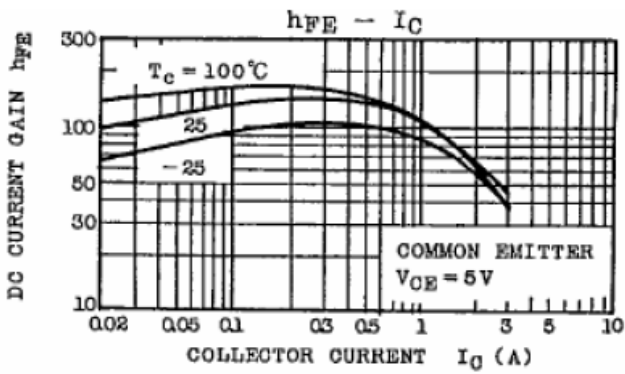
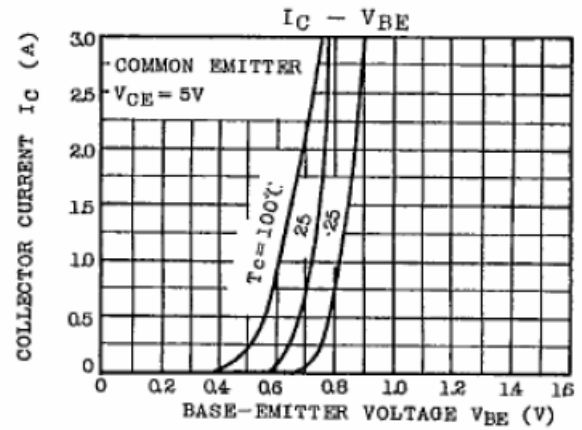
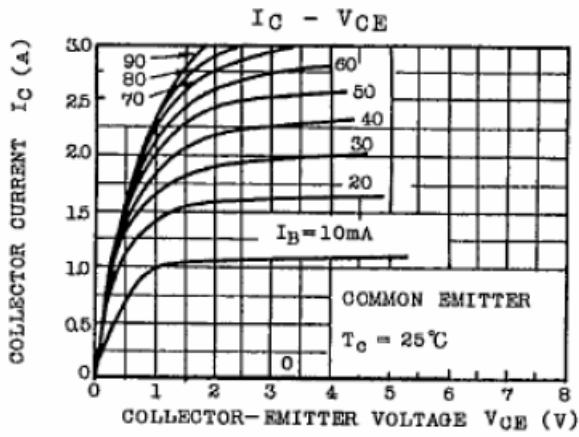
CLASSIFICATION OF h_{FE}

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

