

2SC2706

SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

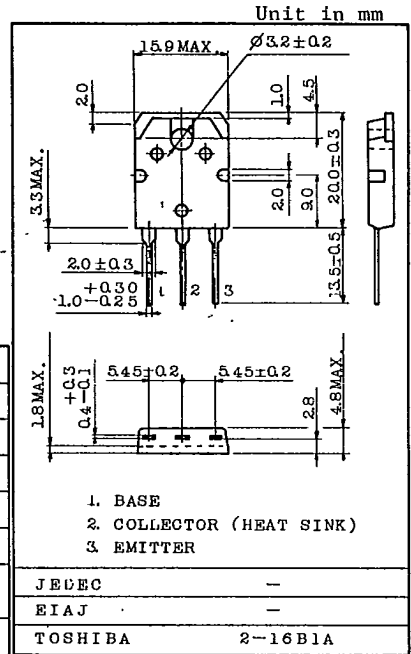
AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS.

FEATURES:

- . Complementary to 2SA1146.
- . Recommended for 70W audio frequency amplifier output stage.
- . High transition frequency : $f_T=90\text{MHz}$ (Typ.)

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	140	V
Collector-Emitter Voltage	V_{CE0}	140	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	10	A
Base Current	I_B	1	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	100	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

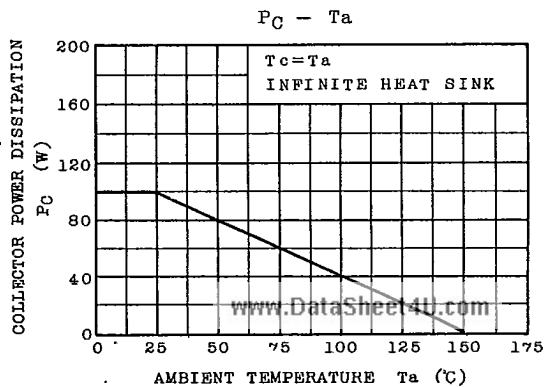
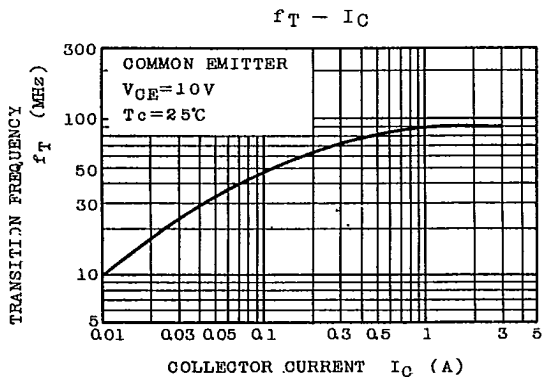
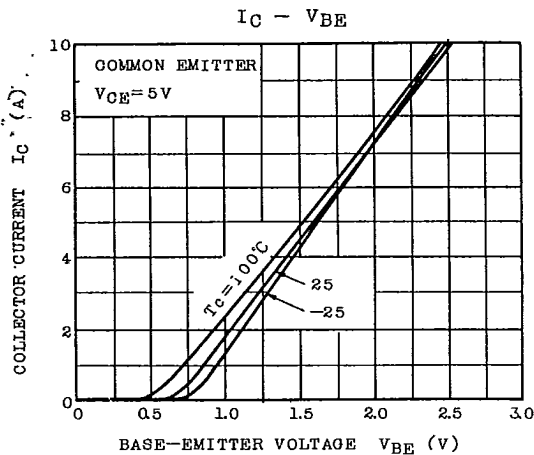
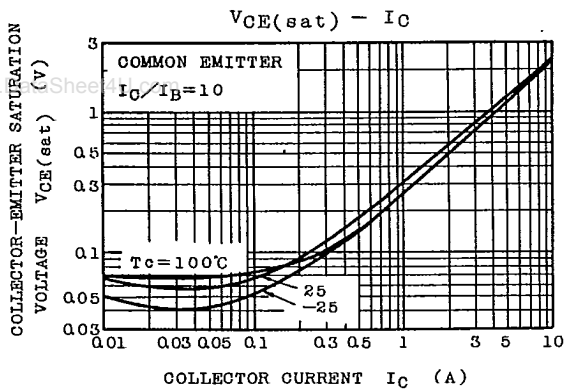
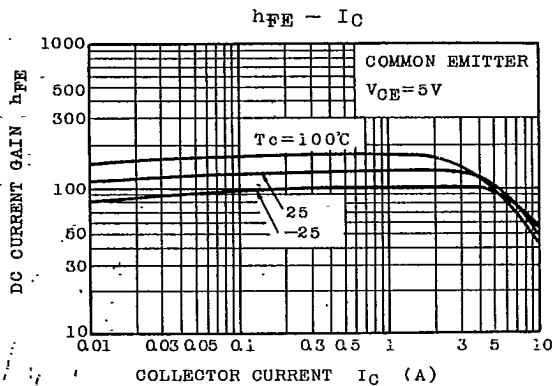
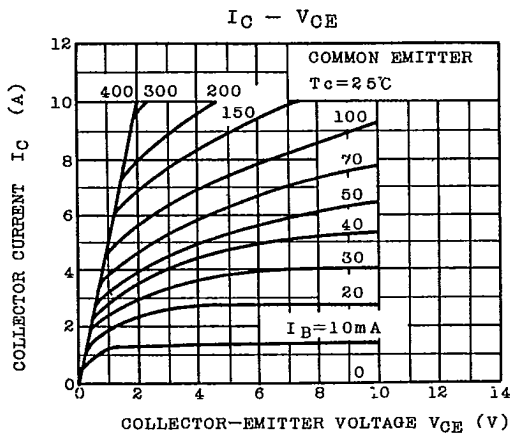


Weight : 4.6g

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=140\text{V}$, $I_E=0$	-	-	50	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}$, $I_C=0$	-	-	50	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C=50\text{mA}$, $I_B=0$	140	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=5\text{V}$, $I_C=1\text{A}$	55	-	240	
	$h_{FE(2)}$	$V_{CE}=5\text{V}$, $I_C=5\text{A}$	30	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5\text{A}$, $I_B=0.5\text{A}$	-	-	2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5\text{V}$, $I_C=5\text{A}$	-	-	2.5	V
Transition Frequency	f_T	$V_{CE}=10\text{V}$, $I_C=1\text{A}$	-	90	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$	-	130	-	pF

Note: h_{FE} Classification. R:55~110, O:80~160, Y:120~240



SAFE OPERATING AREA

