

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

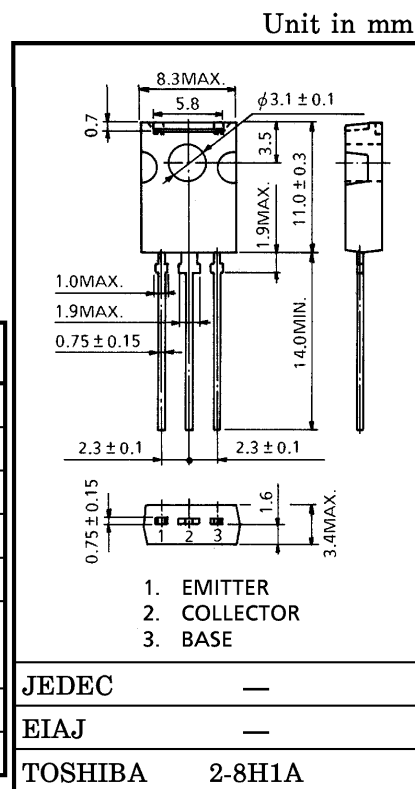
2SC3421

AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS.

- Complementary to 2SA1358
- Suitable for Driver of 60 to 80 Watts Audio Amplifier
- High Breakdown Voltage

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	120	V
Collector-Emitter Voltage		V_{CEO}	120	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	1	A
Base Current		I_B	100	mA
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	P_C	1.5	W
	$T_c = 25^\circ\text{C}$		10	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

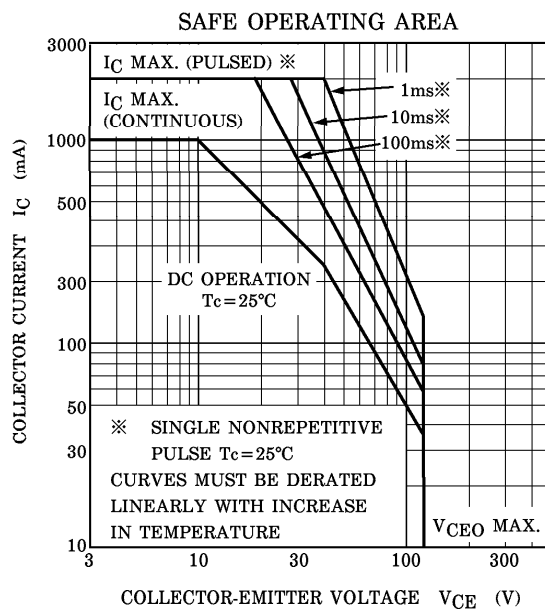
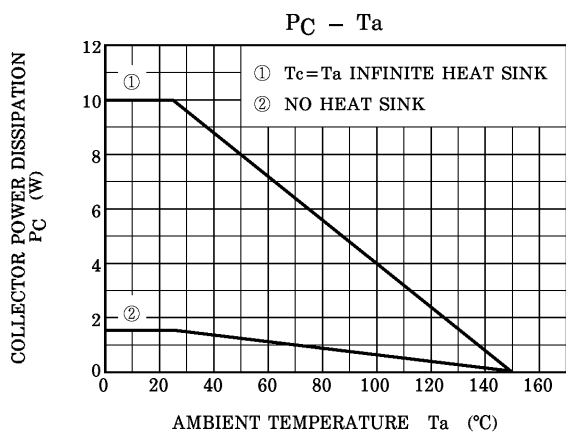
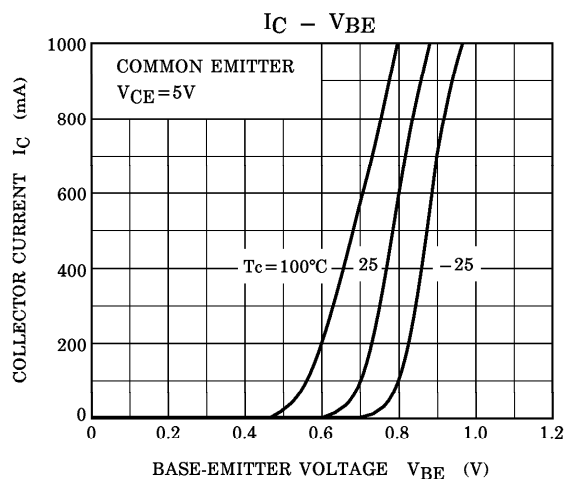
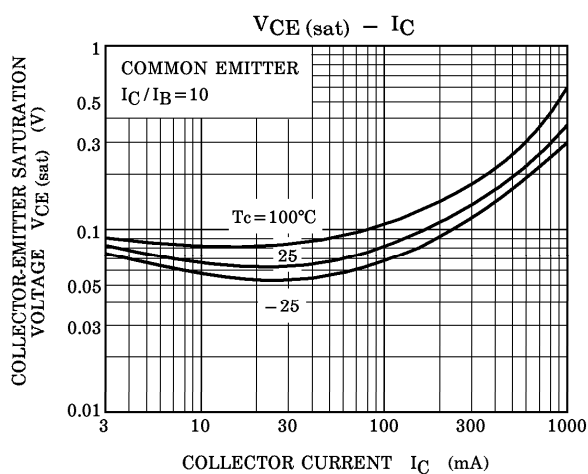
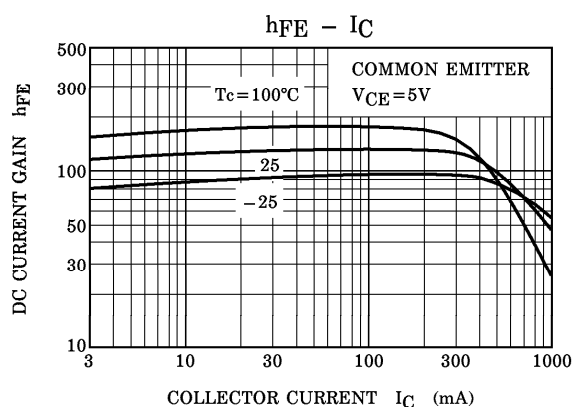
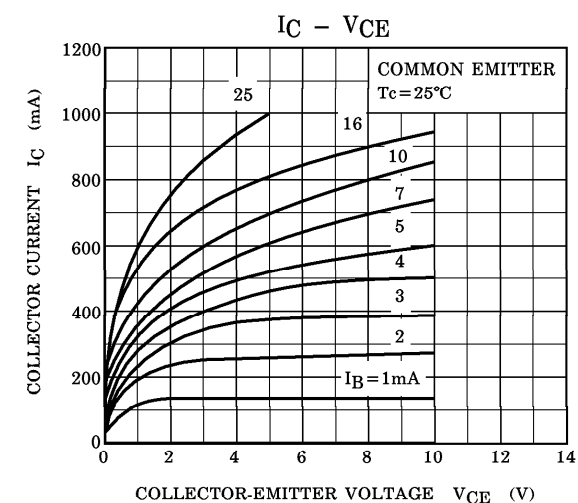


Weight : 0.82g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 120\text{V}$, $I_E = 0$	—	—	100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}$, $I_C = 0$	—	—	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR) CEO}$	$I_C = 10\text{mA}$, $I_B = 0$	120	—	—	V
DC Current Gain	h_{FE} (Note)	$V_{CE} = 5\text{V}$, $I_C = 100\text{mA}$	80	—	240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}$, $I_B = 50\text{mA}$	—	0.30	1.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5\text{V}$, $I_C = 500\text{mA}$	—	0.78	1.0	V
Transition Frequency	f_T	$V_{CE} = 5\text{V}$, $I_C = 100\text{mA}$	—	120	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$	—	15	—	pF

Note : h_{FE} Classification O : 80~160, Y : 120~240



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