TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

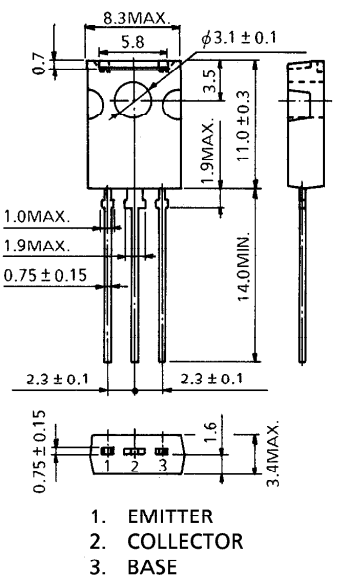
2SC3422

AUDIO FREQUENCY POWER AMPLIFIER.

LOW SPEED SWITCHING.

- Suitable for Output Stage of 5 Watts Car Radio and Car Stereo.
- Good Linearity of h_{FE}.
- Complementary to 2SA1359.

Unit in mm



1. EMITTER
2. COLLECTOR
3. BASE

JEDEC	—
EIAJ	—
TOSHIBA	2-8H1A

Weight : 0.82g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	40	V
Collector-Emitter Voltage		V_{CEO}	40	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	3	A
Base Current		I_B	1	A
Collector Power Dissipation	Ta = 25°C	P_C	1.5	W
	Tc = 25°C		10	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	−55~150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = 40V, I_E = 0	—	—	100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 5V, I_C = 0	—	—	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 10mA, I_B = 0	40	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	V_{CE} = 2V, I_C = 0.5A	80	—	240	
	$h_{FE(2)}$	V_{CE} = 2V, I_C = 2.5A	25	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 2A, I_B = 0.2A	—	—	0.8	V
Base-Emitter Voltage	V_{BE}	V_{CE} = 2V, I_C = 0.5A	—	—	1.0	V
Transition Frequency	f_T	V_{CE} = 2V, I_C = 0.5A	—	100	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz	—	35	—	pF

Note : $h_{FE(1)}$ Classification O : 80~160, Y : 120~240

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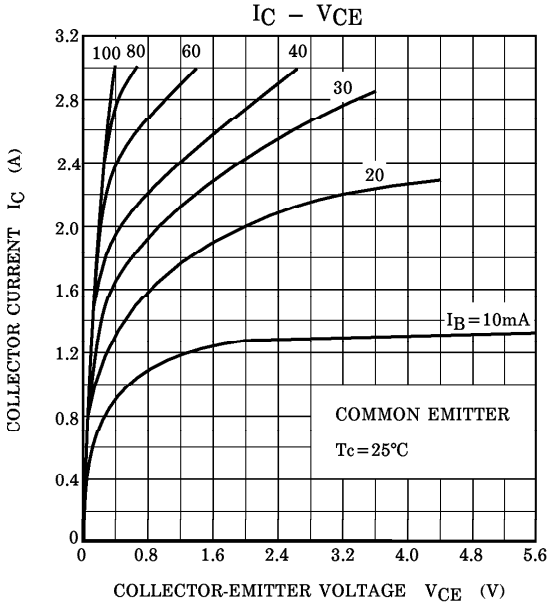
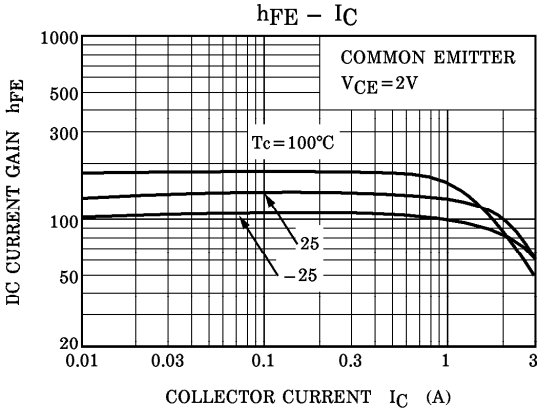
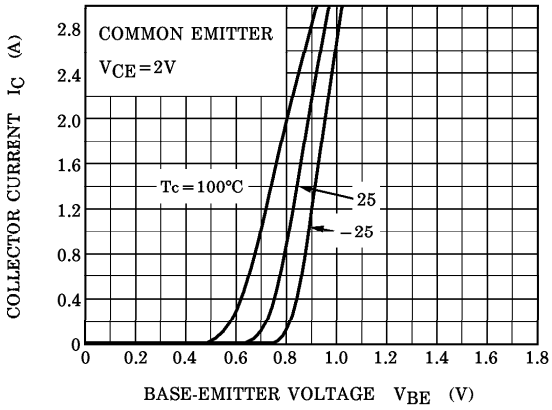
I_C – V_{CE}



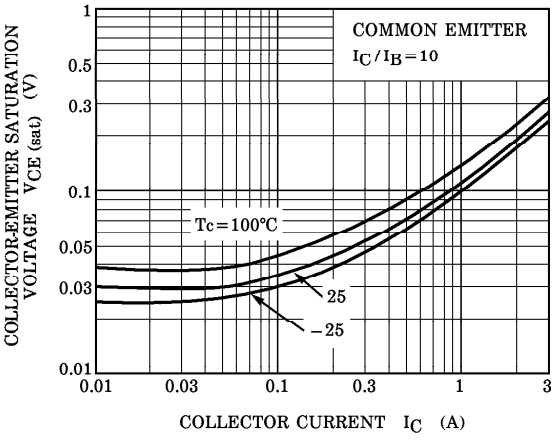
h_{FE} – I_C



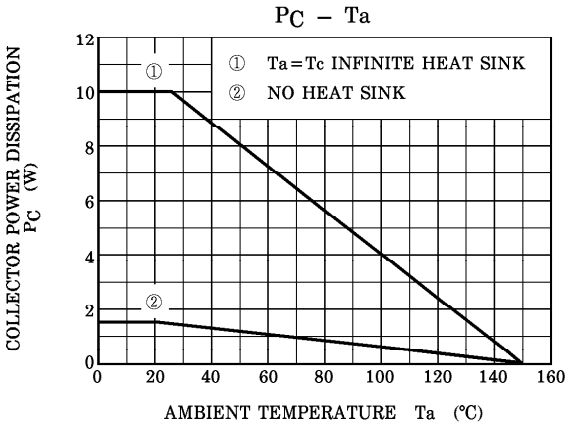
I_C – V_{BE}



$V_{CE\,(sat)}$ – I_C



P_C – Ta



SAFE OPERATING AREA