

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

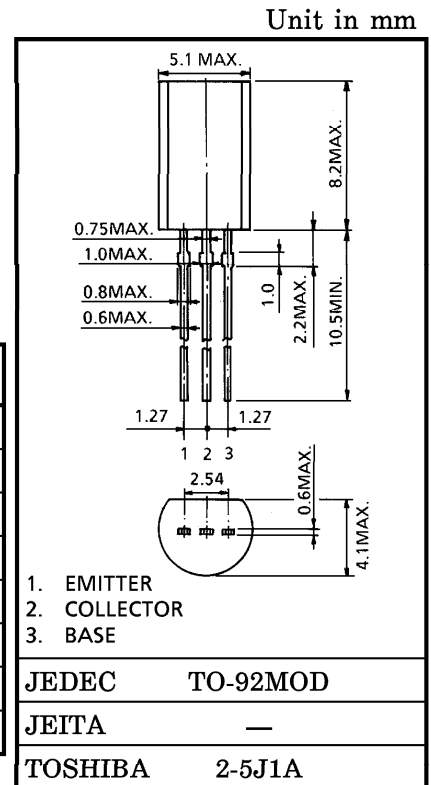
# 2SC2703

AUDIO POWER AMPLIFIER APPLICATIONS

- High DC Current Gain :  $h_{FE} = 100 \sim 320$

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	30	V
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	1	A
Base Current	$I_B$	0.1	A
Collector Power Dissipation	$P_C$	900	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

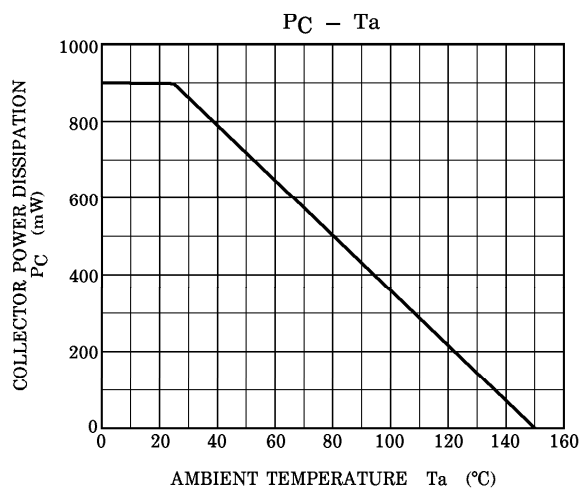
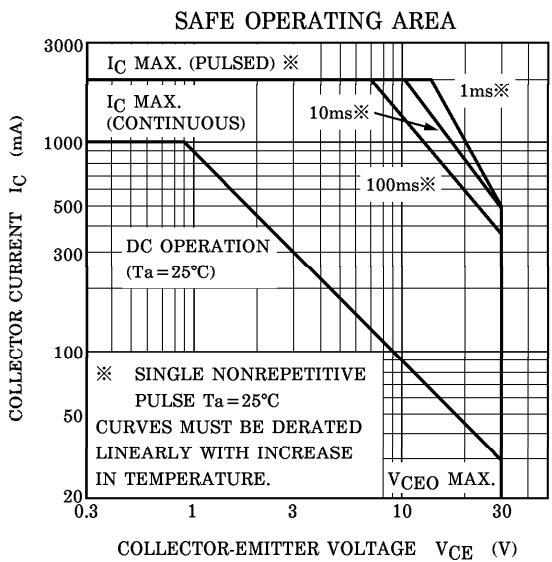
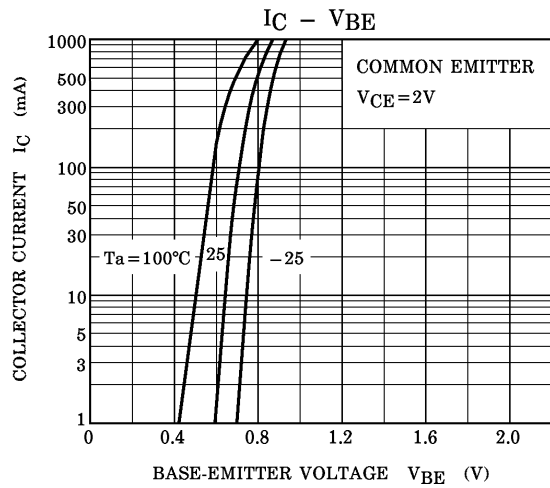
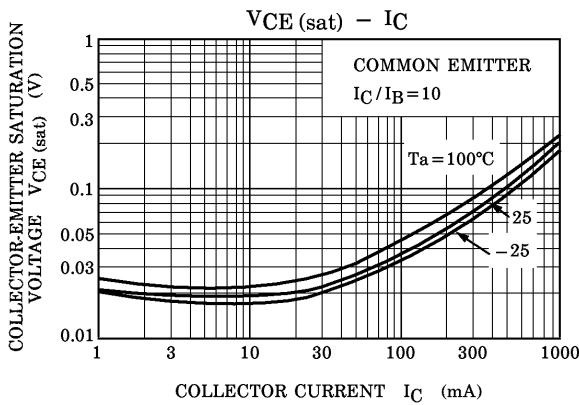
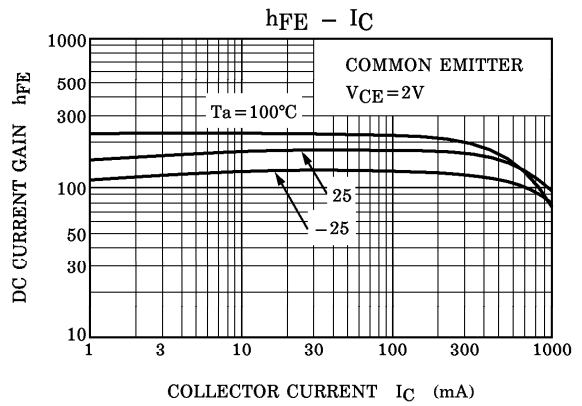
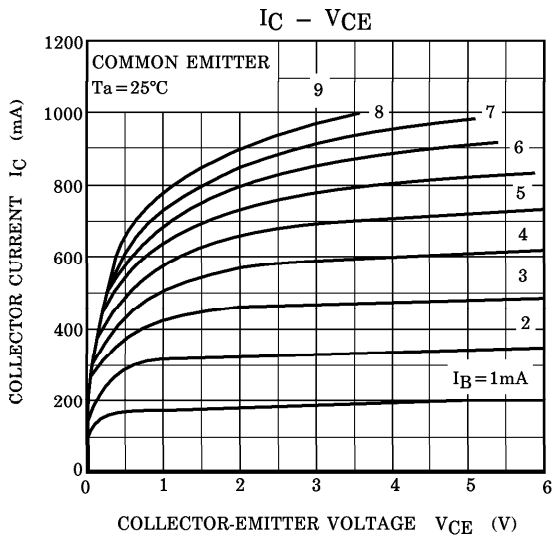


Weight : 0.36g (Typ.)

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 30V, I_E = 0$	—	—	100	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$	—	—	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	30	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = 2V, I_C = 100mA$	100	—	320	
	$h_{FE(2)}$	$V_{CE} = 2V, I_C = 800mA$	40	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 800mA, I_B = 80mA$	—	—	0.5	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = 2V, I_C = 800mA$	—	0.9	1.5	V
Transition Frequency	$f_T$	$V_{CE} = 2V, I_C = 100mA$	—	150	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10V, I_E = 0, f = 1MHz$	—	13	—	pF

(Note) :  $h_{FE(1)}$  Classification    O : 100~200,    Y : 160~320



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