

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

# 2SC2710

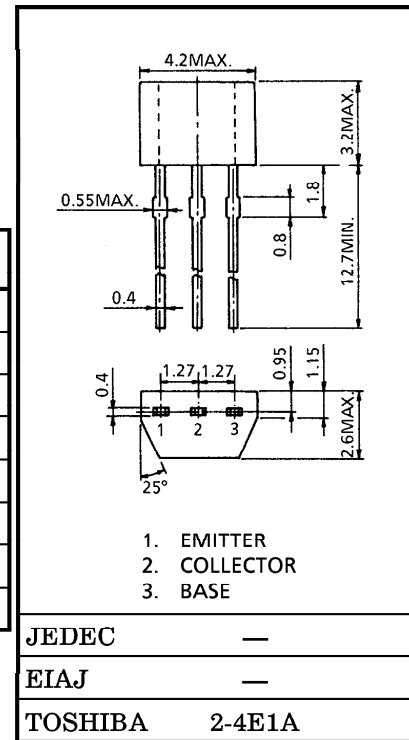
FOR AUDIO AMPLIFIER APPLICATIONS

Unit in mm

- High DC Current Gain :  $h_{FE(1)} = 100 \sim 320$
- Complementary to 2SA1150

**MAXIMUM RATINGS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	35	V
Collector-Emitter Voltage	V <sub>CEO</sub>	30	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	I <sub>C</sub>	800	mA
Base Current	I <sub>B</sub>	160	mA
Collector Power Dissipation	P <sub>C</sub>	300	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C



**ELECTRICAL CHARACTERISTICS (Ta = 25°C)**

Weight : 0.13g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CB0</sub>	V <sub>CB</sub> = 35V, I <sub>E</sub> = 0	—	—	0.1	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> = 0	—	—	0.1	μA
Collector-Emitter Breakdown Voltage	V (BR) CEO	I <sub>C</sub> = 10mA, I <sub>B</sub> = 0	30	—	—	V
DC Current Gain	h <sub>FE(1)</sub> (Note)	V <sub>CE</sub> = 1V, I <sub>C</sub> = 100mA	100	—	320	
	h <sub>FE(2)</sub>	V <sub>CE</sub> = 1V, I <sub>C</sub> = 700mA	35	—	—	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 500mA, I <sub>B</sub> = 20mA	—	—	0.5	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> = 1V, I <sub>C</sub> = 10mA	0.5	—	0.8	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = 5V, I <sub>C</sub> = 10mA	—	120	—	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f = 1MHz	—	13	—	pF

Note : h<sub>FE(1)</sub> Classification O : 100~200, Y : 160~320

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