

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

# 2SC5052

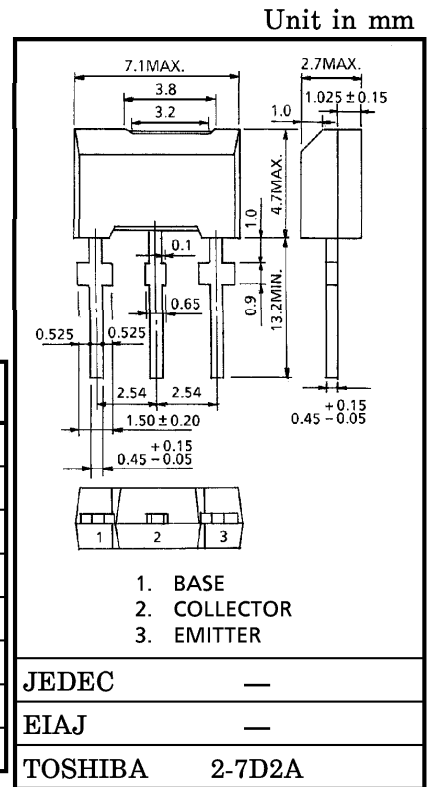
AUDIO POWER AMPLIFIER APPLICATIONS.

DRIVER STAGE AMPLIFIER APPLICATIONS.

- Complementary to 2SA1899

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	120	V
Collector-Emitter Voltage	V <sub>CEO</sub>	120	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>	1000	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> = 120V, I <sub>E</sub> = 0	—	—	100	nA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> = 0	—	—	100	nA
Collector-Emitter Breakdown Voltage	V <sub>(BR) CEO</sub>	I <sub>C</sub> = 10mA, I <sub>B</sub> = 0	120	—	—	V
Emitter-Base Breakdown Voltage	V <sub>(BR) EBO</sub>	I <sub>E</sub> = 1mA, I <sub>C</sub> = 0	5	—	—	V
DC Current Gain	h <sub>FE</sub> (Note)	V <sub>CE</sub> = 5V, I <sub>C</sub> = 100mA	80	—	240	
Collector-Emitter Saturation Voltage	V <sub>CE (sat)</sub>	I <sub>C</sub> = 500mA, I <sub>B</sub> = 50mA	—	—	1.0	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> = 5V, I <sub>C</sub> = 500mA	—	—	1.0	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = 5V, I <sub>C</sub> = 100mA	—	120	—	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f = 1MHz	—	—	30	pF

Note : h<sub>FE</sub> Classification O : 80~160, Y : 120~240

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