

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC1627A

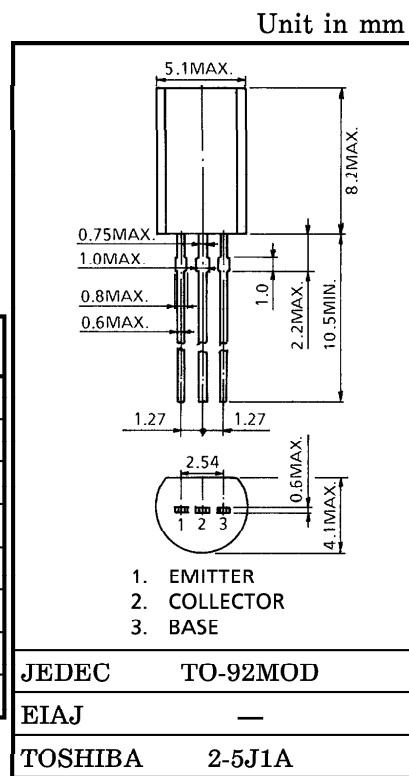
DRIVER STAGE AMPLIFIER APPLICATIONS.

VOLTAGE AMPLIFIER APPLICATIONS.

- Complementary to 2SA817A.
- Driver Stage Application of 30 to 35 Watts Amplifiers.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	400	mA
Base Current	I_B	40	mA
Collector Power Dissipation	P_C	800	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

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

Weight : 0.36g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 50\text{V}, I_E = 0$	—	—	100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	—	—	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 5\text{mA}, I_B = 0$	80	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = 2\text{V}, I_C = 50\text{mA}$	70	—	240	
	$h_{FE(2)}$	$V_{CE} = 2\text{V}, I_C = 200\text{mA}$	40	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 200\text{mA}, I_B = 20\text{mA}$	—	—	0.4	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 2\text{V}, I_C = 5\text{mA}$	0.55	—	0.8	V
Transition Frequency	f_T	$V_{CE} = 10\text{V}, I_C = 10\text{mA}$	—	100	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, f = 1\text{MHz}$	—	10	—	pF

Note : $h_{FE(1)}$ Classification O : 70~140, Y : 120~240

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