

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

# 2SA817A

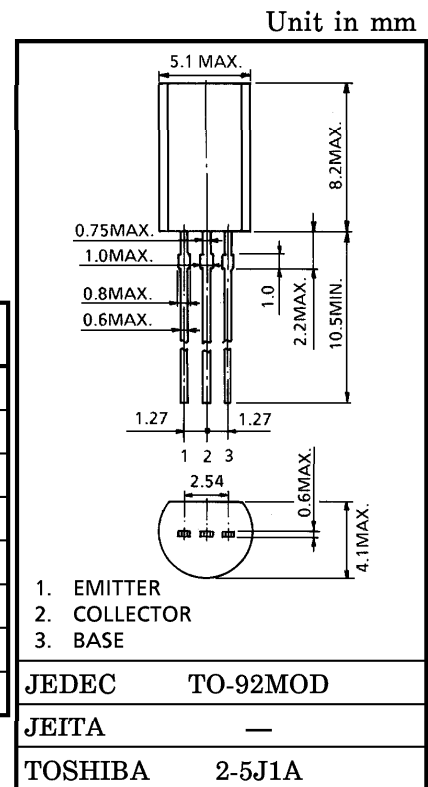
DRIVER STAGE AMPLIFIER APPLICATIONS

VOLTAGE AMPLIFIER APPLICATIONS

- Complementary to 2SC1627A.
- 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
Emitter Current	$I_E$	400	mA
Collector Power Dissipation	$P_C$	800	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ\text{C}$

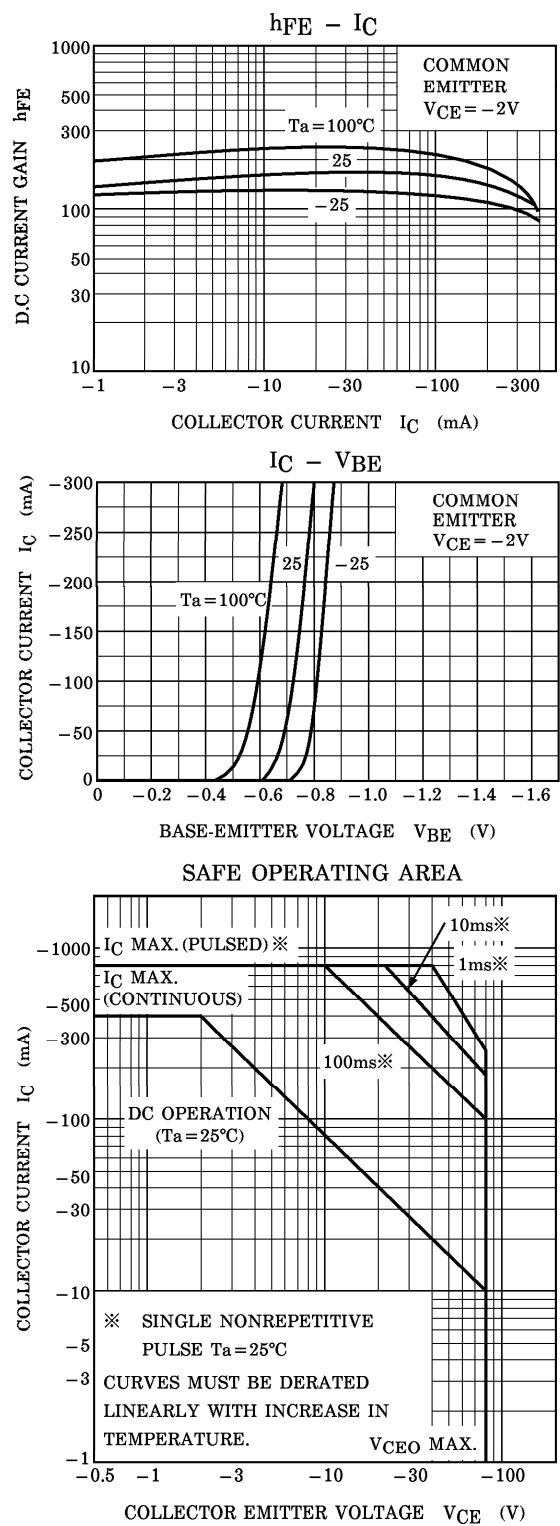
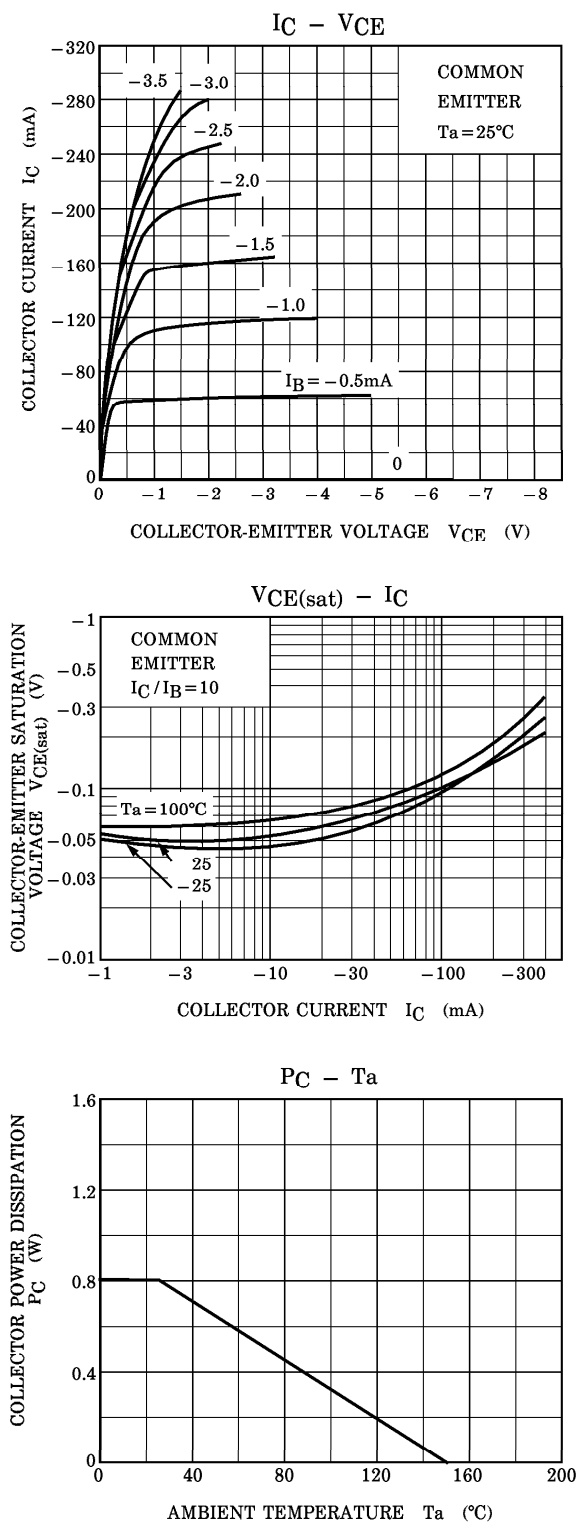


Weight : 0.36g (Typ.)

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

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	$C_{ob}$	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$	—	14	—	pF

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



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