Unit in mm

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

# 2 S A 1 4 2 6

#### **AUDIO POWER AMPLIFIER APPLICATIONS**

• High  $h_{FE}$ :  $h_{FE} = 100 \sim 320$ 

• 1 W Output Applications.

• Complementary to 2SC3666.

### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$v_{CBO}$	-35	V
Collector-Emitter Voltage	$v_{CEO}$	-30	V
Emitter-Base Voltage	$v_{\mathrm{EBO}}$	-5	V
Collector Current	$I_{\mathbf{C}}$	-800	mA
Base Current	$I_{\mathbf{B}}$	-160	mA
Collector Power Dissipation	$P_{\mathbf{C}}$	1000	mW
Junction Temperature	$T_{j}$	150	°C
Storage Temperature Range	$\mathrm{T}_{\mathrm{stg}}$	-55~150	°C

7.1MAX

3.8

3.8

3.2

0.55 - 0.05

0.65

0.45 - 0.05

1. BASE
2. COLLECTOR
3. EMITTER

JEDEC

JEITA

TOSHIBA

2.7MAX

1.02.7MAX

1.

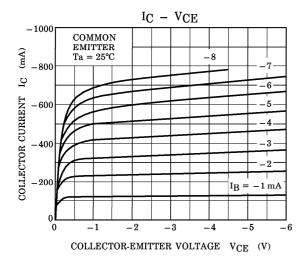
Weight: 0.2 g (Typ.)

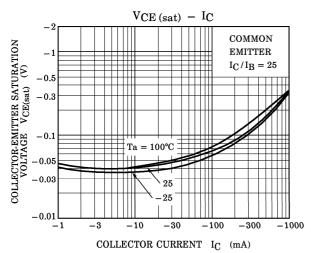
## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

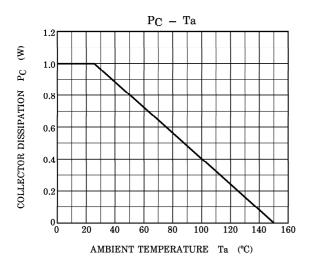
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -35 \text{ V}, I_{E} = 0$	_	_	-100	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5 V, I_{C} = 0$	_	_	-100	nA
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{ m C} = -10{ m mA}$	-30	_	_	V
DC Current Gain	h <sub>FE (1)</sub> (Note)	$V_{ m CE} = -1   m V,  I_{ m C} = -100   m mA$	100	_	320	
	hFE (2)	$V_{CE} = -1 \text{ V}, I_{C} = -700 \text{ mA}$	35	_	_	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_{\rm C} = -500  { m mA},  I_{ m B} = 20  { m mA}$	_	_	-0.7	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -1 \text{ V}, I_{C} = -10 \text{ mA}$	-0.5	_	-0.8	V
Transition Frequency	$ m f_{T}$	$V_{CE} = -5 \text{ V}, I_{C} = -10 \text{ mA}$	_	120	_	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10 \mathrm{V, f} = 1 \mathrm{MHz}$	_	19	_	pF

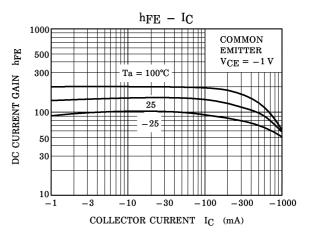
(Note):  $h_{FE(1)}$  Classification  $O: 100\sim200, Y: 160\sim320$ 

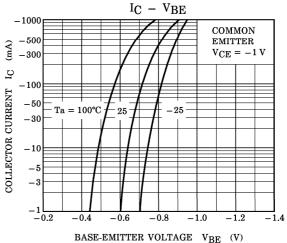
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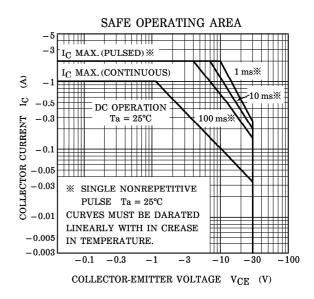












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