### TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

# 2 S A 1 9 4 2

#### POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5199
- Recommend for 80 W High Fidelity Audio Frequency Amplifier Output Stage.

### MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$v_{CBO}$	-160	V
Collector-Emitter Voltage	$v_{CEO}$	-160	V
Emitter-Base Voltage	$v_{\mathrm{EBO}}$	-5	V
Collector Current	$I_{\mathbf{C}}$	-12	Α
Base Current	$I_{\mathbf{B}}$	-1.2	Α
Collector Power Dissipation (Tc = 25°C)	PC	120	w
Junction Temperature	$T_{\rm j}$	150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

Weight: 9.75 g (Typ.)

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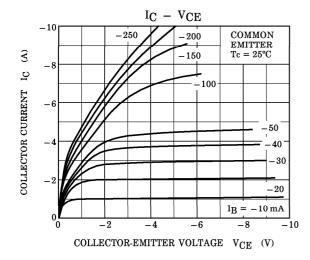
**TOSHIBA** 

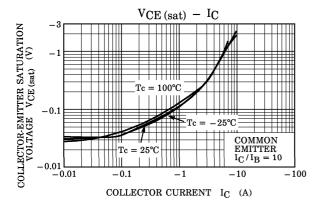
## ELECTRICAL CHARACTERISTICS (Tc = 25°C)

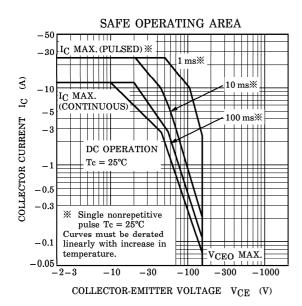
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -160 \text{ V}, I_{E} = 0$	_	_	-5.0	$\mu$ A
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5 V, I_{C} = 0$	_	_	-5.0	$\mu$ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\rm C} = -50  { m mA},  I_{ m B} = 0$	-160	_	_	V
DC Current Gain	hFE (1) (Note)	$V_{CE} = -5 \text{ V}, I_{C} = -1 \text{ A}$	55	_	160	
	h <sub>FE (2)</sub>	$V_{CE} = -5 \text{ V}, I_{C} = -6 \text{ A}$	35	80	_	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_{\rm C} = -8{\rm A},\ I_{\rm B} = -0.8{\rm A}$	_	-1.1	-2.5	V
Base-Emitter Voltage	$ m v_{BE}$	$V_{CE} = -5 V, I_{C} = -6 A$	_	-1.0	-1.5	V
Transition Frequency	$ m f_T$	$V_{CE} = -5 \text{ V}, I_{C} = -1 \text{ A}$	_	30	_	MHz
Collector Output Capacitance	C <sub>ob</sub>	$V_{CB} = -10 V, I_{E} = 0,$ f = 1 MHz	_	320	_	pF

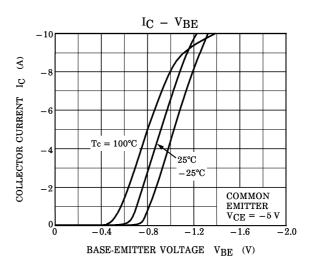
(Note) :  $h_{FE(1)}$  Classification  $R:55\sim110$ ,  $O:80\sim160$ 

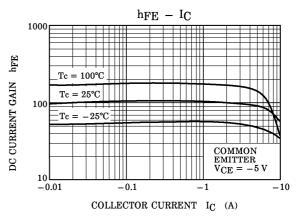
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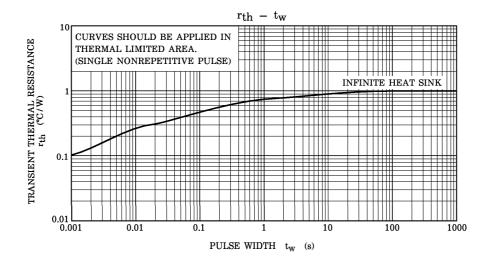








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