#### TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

# 2 S A 1 9 4 0

### POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5197
- Recommend for 55W High Fidelity Audio Frequency Amplifier Output Stage.

# MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$v_{\mathrm{CBO}}$	-120	V
Collector-Emitter Voltage	$v_{CEO}$	-120	V
Emitter-Base Voltage	$v_{\mathrm{EBO}}$	-5	V
Collector Current	$I_{\mathbf{C}}$	-8	A
Base Current	$I_{\mathbf{B}}$	-0.8	A
Collector Power Dissipation (Tc=25°C)	PC	80	w
Junction Temperature	$T_{j}$	150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

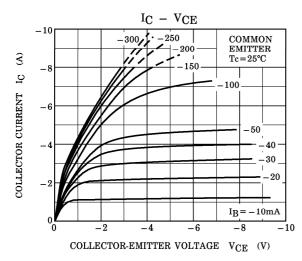
Weight: 4.7g (Typ.)

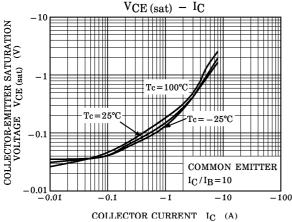
## ELECTRICAL CHARACTERISTICS (Tc = 25°C)

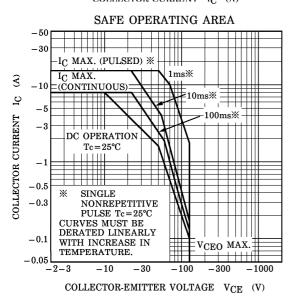
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{\mathrm{CBO}}$	$V_{CB} = -120V, I_{E} = 0$	_	_	-5.0	$\mu$ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = -5V, I_{C} = 0$	_	_	-5.0	$\mu$ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{C} = -50 \text{mA}, I_{B} = 0$	-120	_	_	V
DC Current Gain	hFE (1) (Note)	$V_{CE} = -5V, I_{C} = -1A$	55	_	160	
	h <sub>FE (2)</sub>	$V_{CE} = -5V, I_{C} = -4A$	35	75	_	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_C = -6A, I_B = -0.6A$	_	-0.80	-2.0	V
Base-Emitter Voltage	$V_{ m BE}$	$V_{CE} = -5V, I_{C} = -4A$	_	-0.97	-1.5	V
Transition Frequency	$ m f_{T}$	$V_{CE} = -5V$ , $I_{C} = -1A$	_	30	_	MHz
Collector Output Capacitance	$C_{ m ob}$	$V_{CB} = -10V, I_{E} = 0, f = 1MHz$	_	260	_	рF

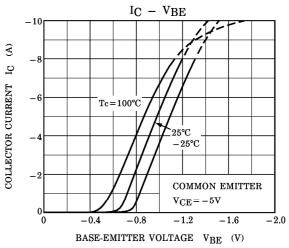
(Note):  $h_{FE(1)}$  Classification R: 55~110, O: 80~160

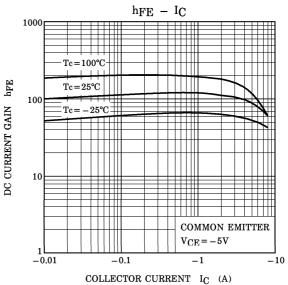
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