TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

2 S A 1 9 4 3

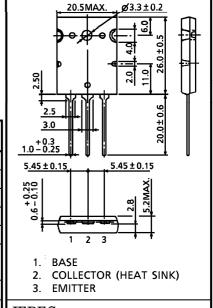
POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5200
- Recommended for 100 W High Fidelity Audio Frequency Amplifier Output Stage.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	v_{CBO}	-230	V
Collector-Emitter Voltage	v_{CEO}	-230	V
Emitter-Base Voltage	v_{EBO}	-5	V
Collector Current	$I_{\mathbf{C}}$	-15	A
Base Current	$I_{\mathbf{B}}$	-1.5	A
Collector Power Dissipation (Tc = 25°C)	PC	150	w
Junction Temperature	T_{j}	150	$^{\circ}\mathrm{C}$
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

Unit in mm



JEDEC —
JEITA —
TOSHIBA 2-21F1A

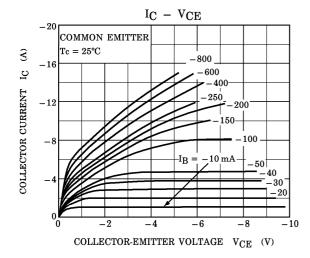
Weight: 9.75 g (Typ.)

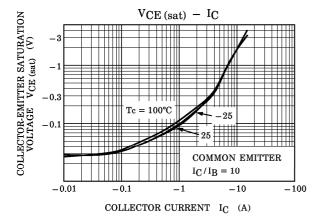
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

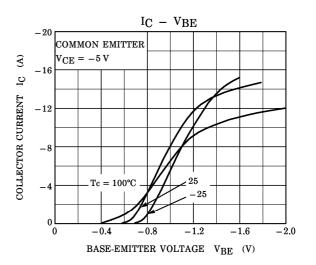
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -230 \text{ V}, I_{E} = 0$	_	_	-5.0	μ A
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5 V, I_{C} = 0$	_	_	-5.0	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\rm C} = -50 { m mA}, I_{ m B} = 0$	-230	_	_	V
DC Current Gain	hFE (1) (Note)	$V_{CE} = -5 \text{ V}, I_{C} = -1 \text{ A}$	55	_	160	
	h _{FE (2)}	$V_{CE} = -5 \text{ V}, I_{C} = -7 \text{ A}$	35	60	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C} = -8{\rm A},\ I_{\rm B} = -0.8{\rm A}$		-1.5	-3.0	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -5 V, I_{C} = -7 A$	_	-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 _{ob}	$V_{CB} = -10 V, I_{E} = 0,$ f = 1 MHz	_	360	_	рF

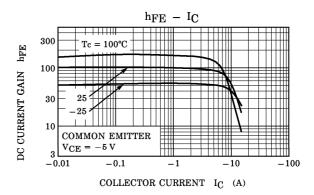
(Note): $h_{FE(1)}$ Classification R: 55~110, O: 80~160

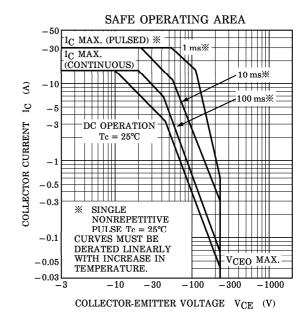
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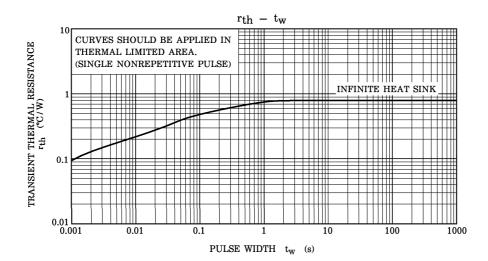








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3 2001-10-29

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