TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2 S C 2 7 0 3

AUDIO POWER AMPLIFIER APPLICATIONS.

High DC Current Gain: hFE=100~320

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Collector-Base Voltage	VCBO	30	V	
Collector-Emitter Voltage	VCEO	30	V	
Emitter-Base Voltage	V_{EBO}	5	V	
Collector Current	$I_{\mathbf{C}}$	1	Α	
Base Current	I_{B}	0.1	Α	
Collector Power Dissipation	$P_{\mathbf{C}}$	900	mW	
Junction Temperature	T_{j}	150	°C	
Storage Temperature Range	$ m T_{stg}$	-55~150	$^{\circ}\mathrm{C}$	

Unit in mm 5.1MAX 0.75MAX 1.0MAX 0.6MAX **EMITTER** 2. COLLECTOR BASE **JEDEC** TO-92MOD **EIAJ** TOSHIBA 2-5J1A

Weight: 0.36g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 30V, I_E = 0$	_	_	100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	_	_	100	nA
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_C=10$ mA, $I_B=0$	30	_	_	V
DC Current Gain	hFE (1) (Note)	V _{CE} =2V, I _C =100mA	100	_	320	
	hFE (2)	$V_{CE} = 2V, I_{C} = 800 \text{mA}$	40	_	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{C} = 800 \text{mA}, I_{B} = 80 \text{mA}$	_	_	0.5	V
Base-Emitter Voltage	$v_{ m BE}$	$V_{CE} = 2V, I_{C} = 800 \text{mA}$	_	0.9	1.5	v
Transition Frequency	$ m f_{T}$	$V_{CE} = 2V, I_{C} = 100 \text{mA}$	_	150	_	MHz
Collector Output Capacitance	C _{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	_	13	_	pF

Note: hFE(1) Classification O: 100~200, Y: 160~320

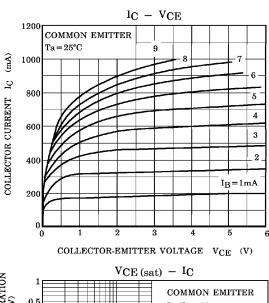
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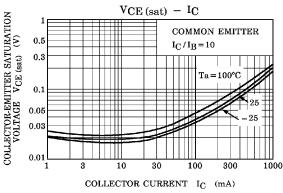
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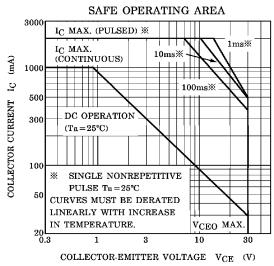
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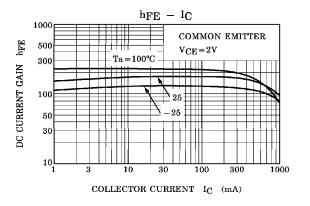
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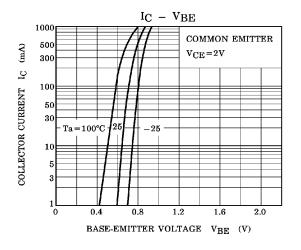
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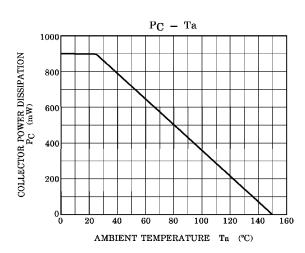












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