TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

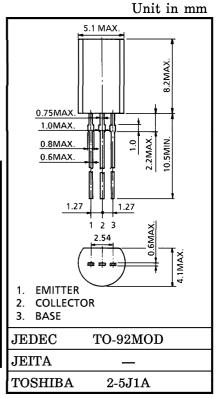
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AUDIO POWER AMPLIFIER APPLICATIONS

• Complementary to 2SA966 and 3 Watts Output Applications.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	v_{CBO}	30	V
Collector-Emitter Voltage	v_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	$I_{\mathbf{C}}$	1.5	A
Base Current	$I_{\mathbf{B}}$	0.15	A
Collector Power Dissipation	PC	900	mW
Junction Temperature	T_{j}	150	$^{\circ}\mathrm{C}$
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	$^{\circ}\mathrm{C}$



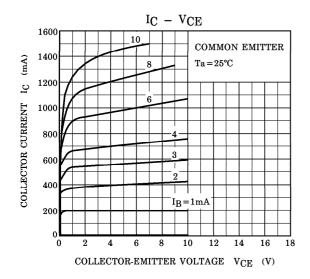
Weight: 0.36g (Typ.)

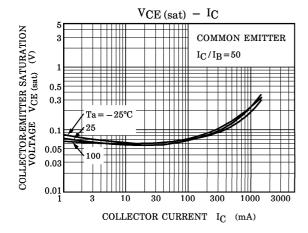
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

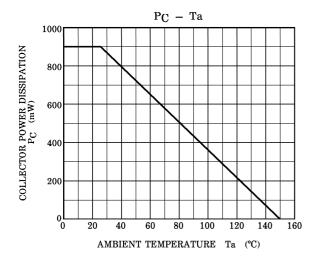
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CBO}	$V_{CB} = 30V, I_{E} = 0$	_		100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_{C}=0$	-	_	100	nA
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\rm C}$ =10mA, $I_{\rm B}$ =0	30	_	_	V
Emitter-Base Breakdown Voltage	V (BR) EBO	$I_{\rm E}$ =1mA, $I_{\rm C}$ =0	5	_	_	V
DC Current Gain	h _{FE} (Note)	$V_{\text{CE}} = 2V, I_{\text{C}} = 500 \text{mA}$	100	_	320	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C}$ =1.5A, $I_{\rm B}$ =0.03A	_	_	2.0	V
Base-Emitter Voltage	$V_{ m BE}$	$V_{\text{CE}} = 2V, I_{\text{C}} = 500 \text{mA}$	_	_	1.0	V
Transition Frequency	$ m f_{T}$	$V_{CE} = 2V, I_{C} = 500 \text{mA}$		120		MHz
Collector Output Capacitance	C _{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	_	_	30	pF

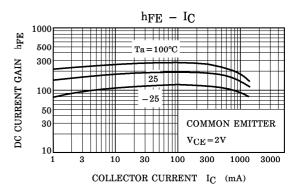
(Note): hFE Classification O: 100~200, Y: 160~320

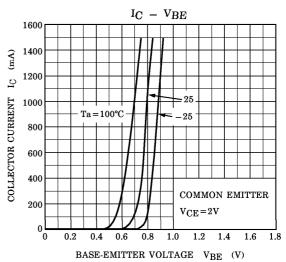
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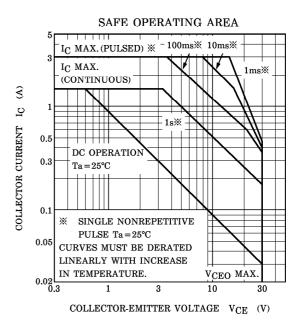












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