TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2 S C 2 2 3 6

AUDIO POWER AMPLIFIER APPLICATIONS.

Complementary to 2SA966 and 3 Watts Output Applications.

MAXIMUM RATINGS (Ta = 25°C)

SYMBOL	RATING	UNIT
v_{CBO}	30	V
v_{CEO}	30	V
$v_{ m EBO}$	5	v
$I_{\mathbf{C}}$	1.5	Α
I_{B}	0.15	Α
$P_{\mathbf{C}}$	900	mW
$\mathbf{T_{j}}$	150	$^{\circ}\mathrm{C}$
$ m T_{stg}$	-55~150	°C
	$\begin{array}{c} V_{\text{CBO}} \\ V_{\text{CEO}} \\ V_{\text{EBO}} \\ I_{\text{C}} \\ I_{\text{B}} \\ P_{\text{C}} \\ T_{\text{j}} \end{array}$	VCBO 30 VCEO 30 VEBO 5 IC 1.5 IB 0.15 PC 900 Tj 150

Unit in mm 15.1MAX 0.75MAX 1.0MAX 0.6MAX **EMITTER** 2. **COLLECTOR** 3. BASE **JEDEC** TO-92MOD **EIAJ** TOSHIBA 2-5J1A

Weight: 0.36g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

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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	$I_{ m EBO}$	$V_{EB}=5V, I_{C}=0$	_	_	100	nA
Collector-Emitter Breakdown Voltage	V (BR) CEO	I _C =10mA, I _B =0	30	_	_	V
Emitter-Base Breakdown Voltage	V (BR) EBO	$I_{E}=1mA, I_{C}=0$	5	_	_	v
DC Current Gain	h _{FE} (Note)	$V_{CE}=2V, I_{C}=500mA$	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	$ m V_{BE}$	$V_{CE} = 2V, I_{C} = 500 \text{mA}$	_	_	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 $O: 100\sim200, Y: 160\sim320$

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