Unit in mm

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

# 2 S C 3 4 2 1

### AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS

- Complementary to 2SA1358
- Suitable for Driver of 60 to 80 Watts Audio Amplifier
- High Breakdown Voltage

#### MAXIMUM RATINGS (Tc = 25°C)

CHARACTERIST	SYMBOL	RATING	UNIT		
Collector-Base Voltage		$v_{\mathrm{CBO}}$	120	V	
Collector-Emitter Voltage		$v_{CEO}$	120	V	
Emitter-Base Voltage		$v_{ m EBO}$	5	V	
Collector Current		$I_{\mathbf{C}}$	1	A	
Base Current		$I_{\mathbf{B}}$	100	mA	
Collector Power	Ta = 25°C	Pa	1.5	W	
Dissipation	$Tc = 25^{\circ}C$	$^{\mathrm{P}\mathrm{C}}$	10		
Junction Temperature		$T_{j}$	150	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	-55~150	°C	

8.3MAX.
5.8

9/3.1±0.1

1.0MAX.
1.9MAX.
0.75±0.15

1. EMITTER
2. COLLECTOR
3. BASE

JEDEC —
JEITA —
TOSHIBA 2-8H1A

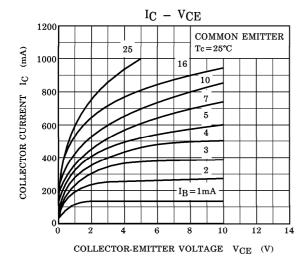
Weight: 0.82g (Typ.)

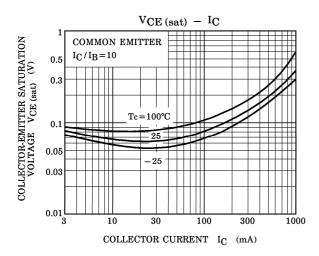
## ELECTRICAL CHARACTERISTICS (Tc = 25°C)

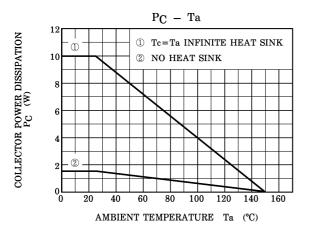
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 120V, I_{E} = 0$	_	_	100	nA
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB}=5V, I_{C}=0$	_	_	100	nA
Collector-Emitter Breakdown Voltage	V <sub>(BR)</sub> CEO	$I_{\rm C}=10{ m mA},~I_{\rm B}=0$	120	_	_	V
DC Current Gain	h <sub>FE</sub> (Note)	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA	80	_	240	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA	_	0.30	1.0	V
Base-Emitter Voltage	$V_{ m BE}$	$V_{\rm CE}$ =5V, $I_{\rm C}$ =500mA	_	0.78	1.0	V
Transition Frequency	$ m f_{T}$	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA	_	120		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10V, I_{E} = 0, f = 1MHz$	_	15	_	pF

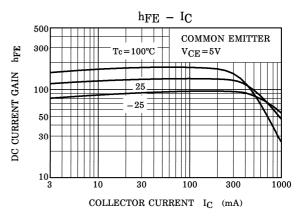
(Note):  $h_{FE}$  Classification  $O: 80\sim160, Y: 120\sim240$ 

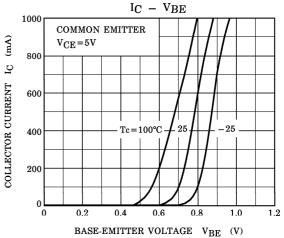
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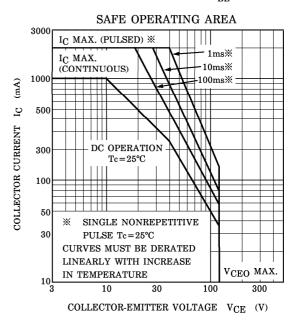












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