Unit in mm

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2 S C 3 4 2 2

AUDIO FREQUENCY POWER AMPLIFIER

LOW SPEED SWITCHING

- Suitable for Output Stage of 5 Watts Car Radio and Car Stereo.
- Good Linearity of hFE.
- Complementary to 2SA1359.

MAXIMUM RATINGS (Tc = 25°C)

CHARACTERIST	SYMBOL	RATING	UNIT		
Collector-Base Voltage		v_{CBO}	40	V	
Collector-Emitter Voltage		v_{CEO}	40	V	
Emitter-Base Voltage		v_{EBO}	5	v	
Collector Current		$I_{\mathbf{C}}$	3	A	
Base Current		$I_{\mathbf{B}}$	1	Α	
Collector Power	Ta = 25°C	Da	1.5	w	
Dissipation	$Tc = 25^{\circ}C$	$^{\mathrm{P}_{\mathrm{C}}}$	10		
Junction Temperature		$\mathrm{T_{j}}$	150	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	-55~150	°C	

8.3MAX. 5.8 93.1±0.1 1.0MAX. 1.9MAX. 0.75±0.15 1. EMITTER 2. COLLECTOR 3. BASE JEDEC JEITA TOSHIBA 2-8H1A

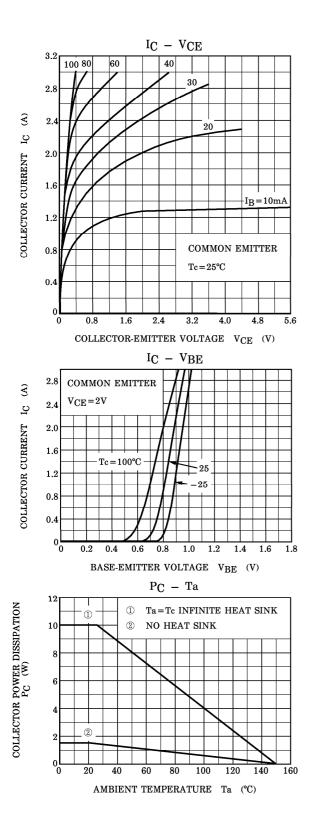
Weight: 0.82g (Typ.)

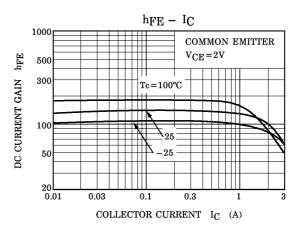
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

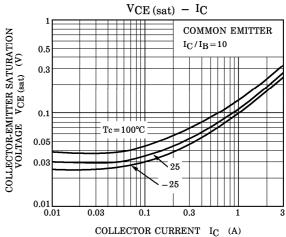
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 40V, I_{E} = 0$	_	_	100	nA
Emitter Cut-off Current	${ m I}_{ m EBO}$	$V_{EB}=5V, I_{C}=0$	_		100	nA
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\rm C}=10{\rm mA},~I_{\rm B}=0$	40	_	_	V
DC Current Gain	hFE (1) (Note)	V_{CE} =2V, I_{C} =0.5A	80	_	240	
	h _{FE (2)}	$V_{CE}=2V$, $I_{C}=2.5A$	25		_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{C}=2A, I_{B}=0.2A$	_	_	0.8	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{\rm CE}$ =2V, $I_{\rm C}$ =0.5A	_		1.0	V
Transition Frequency	$ m f_{T}$	$V_{\rm CE}$ =2V, $I_{\rm C}$ =0.5A	_	100	_	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V, I_{E} = 0, f = 1MHz$	_	35	_	pF

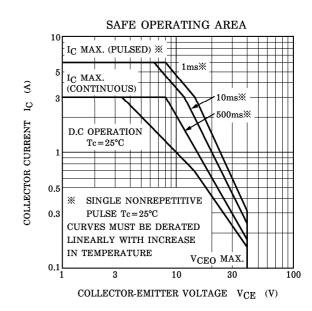
(Note): $h_{FE(1)}$ Classification $O: 80\sim160, Y: 120\sim240$

1 2001-11-05









2 2001-11-05

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