Unit in mm

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2 S A 1 3 2 7 A

STROBE FLASH APPLICATIONS AUDIO POWER AMPLIFIER APPLICATIONS

• High DC Current Gain : h_{FE}=70 (min.)

 $(V_{CE} = -2V, I_{C} = -1A)$

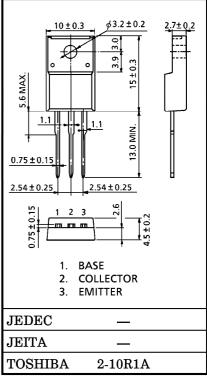
Low Collector Saturation Voltage: $V_{CE (sat)} = -0.5V$ (max.)

 $(I_C = -8A, I_B = -0.4A)$

• High Collector Power Dissipation : P_C=20W (T_c=25°C)

MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		v_{CBO}	-50	V	
Collector-Emitter Voltage		v_{CEO}	-20	V	
Emitter-Base Voltage		$v_{ m EBO}$	-8	V	
Collector Current	DC	IC	-10	A	
	Pulse	ICP	-20		
Base Current		$I_{\mathbf{B}}$	-2	A	
Collector Power	$Ta = 25^{\circ}C$	PC	2.0	w	
Dissipation	Tc = 25°C		20		
Junction Temperature		T_{j}	150	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	T _{stg} -55~150		



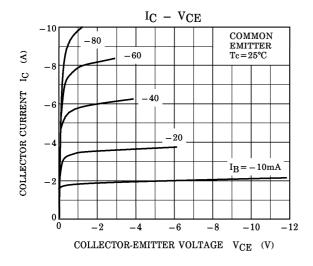
Weight: 1.7g (Typ.)

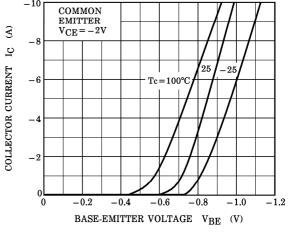
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -50V, I_{E} = 0$	_	_	-1.0	μ A
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -8V, I_{C} = 0$	_	_	-1.0	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_C = -10 \text{mA}, I_B = 0$	-20	_	_	V
DC Current Gain	h _{FE (1)} (Note)	$V_{CE} = -2V, I_{C} = -1A$	100	_	320	_
	h _{FE} (2)	$V_{CE} = -2V$, $I_{C} = -8A$	70	140	_	
Collector-Emitter Saturation Voltage	V _{CE (sat)}	$I_C = -8A, I_B = -0.4A$	_	-0.3	-0.5	V
Base-Emitter Voltage	$v_{ m BE}$	$V_{CE} = -2V, I_{C} = -8A$	_	-0.95	-1.5	V
Transition Frequency	$ m f_{T}$	$V_{CE} = -2V$, $I_{C} = -1A$	_	45	_	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_{E} = 0, f = 1MHz$	_	400		pF

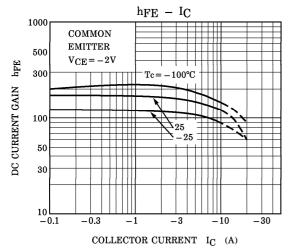
(Note): $h_{FE(1)}$ Classification $O: 100\sim200$, $Y: 160\sim320$

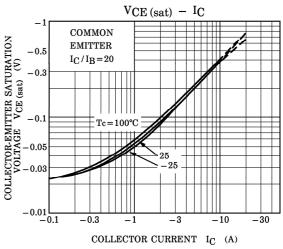
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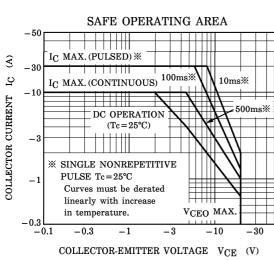


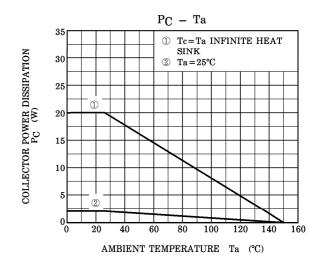


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