TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2 S C 3 2 6 7

POWER AMPLIFIER APPLICATIONS

POWER SWICHING APPLICATIONS

• Low Saturation Voltage : $V_{CE (sat)} = 0.5V (Max.)$ @ $I_C = 2A$

• Complementary to 2SA1297

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	v_{CBO}	20	V
Collector-Emitter Voltage	v_{CEO}	20	V
Emitter-Base Voltage	$v_{ m EBO}$	6	V
Collector Current	$I_{\mathbf{C}}$	2	Α
Base Current	IB	0.5	A
Collector Power Dissipation	PC	400	mW
Junction Temperature	T_{j}	150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

Unit in mm

4.2MAX.

0.55MAX.

1.27,1.27

2.5°

1. EMITTER
2. COLLECTOR
3. BASE

JEDEC

EIAJ

TOSHIBA
2-4E1A

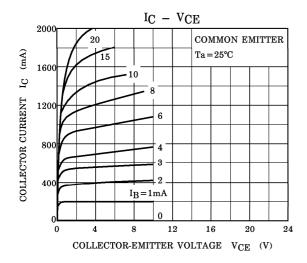
Weight: 0.13g

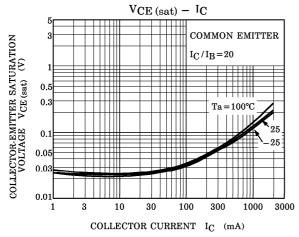
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

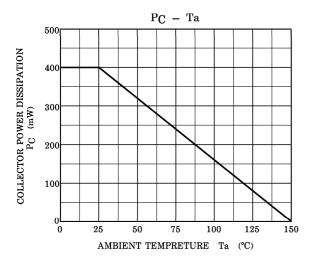
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 20V, I_{E} = 0$	_	_	0.1	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB}=6V, I_{C}=0$	_	_	0.1	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\rm C}$ =10mA, $I_{\rm B}$ =0	20	_	_	V
Emitter-Base Breakdown Voltage	V (BR) EBO	$I_{\rm E}$ =0.1mA, $I_{\rm C}$ =0	6	_	_	V
DC Current Gain	hFE (1) (Note)	$V_{ m CE}$ =2V, I $_{ m C}$ =100mA	120	_	700	
	h _{FE} (2)	$V_{CE}=2V, I_{C}=2A$	75	_	_	
Collector-Emitter Sturation Voltage	V _{CE} (sat)	$I_{C}=2A, I_{B}=0.1A$	_	_	0.5	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = 2V, I_{C} = 0.1A$	_	_	0.85	V
Transition Frequency	${f f_T}$	$V_{CE} = 2V, I_{C} = 0.5A$	_	120	_	MHz
Collector Output Capacitance	C _{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	_	30	_	pF

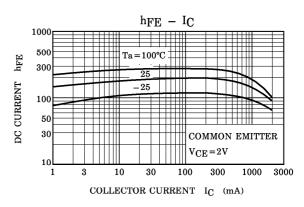
Note : $h_{FE\,(1)}$ Classification $Y:120{\sim}240,~GR:200{\sim}400,~BL:350{\sim}700$

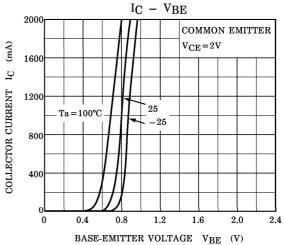
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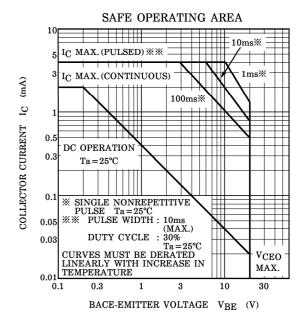












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