Unit in mm

#### TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

# 2 S A 1 8 1 1

LOW FREQUENCY AMPLIFIER APPLICATIONS. DRIVER STAGE AMPLIFIER APPLICATIONS. SWITCHING APPLICATIONS.

- Excellent hFE Linearity
  - :  $h_{FE(2)} = 35 \text{ (Min.)}$ ,  $(V_{CE} = -2V, I_C = -300 \text{mA})$
- Complementary to 2SC4707

### MAXIMUM RATINGS (Ta = 25°C)

SYMBOL	RATING	UNIT	
		UNIT	
$v_{CBO}$	-35	V	
$v_{CEO}$	-30	V	
$v_{ m EBO}$	-5	V	
$I_{\mathbf{C}}$	-500	mA	
$I_{\mathbf{B}}$	-100	mA	
$P_{\mathbf{C}}$	800	mW	
$\mathrm{T_{j}}$	150	°C	
$\mathrm{T_{stg}}$	-55~150	°C	
	$egin{array}{c} V_{ ext{CEO}} \ V_{ ext{EBO}} \ I_{ ext{C}} \ I_{ ext{B}} \ P_{ ext{C}} \ T_{ ext{j}} \ \end{array}$	V <sub>CEO</sub> -30 V <sub>EBO</sub> -5 I <sub>C</sub> -500 I <sub>B</sub> -100 P <sub>C</sub> 800 T <sub>j</sub> 150	

0.75MAX

1.0MAX

0.8MAX

0.6MAX

1.27

2.54

1. EMITTER

2. COLLECTOR

3. BASE

JEDEC TO-92MOD

EIAJ

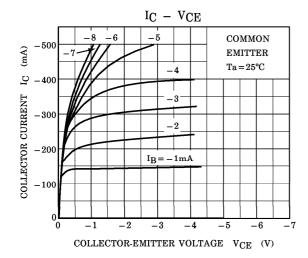
TOSHIBA 2-5J1A

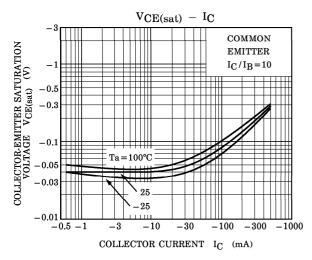
Weight: 0.36g

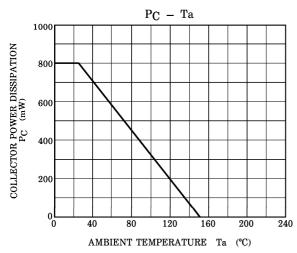
## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

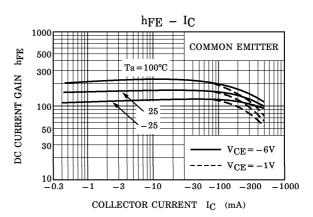
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{\mathrm{CBO}}$	$V_{CB} = -35V, I_{E} = 0$	_		-0.1	$\mu$ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = -5V, I_{C} = 0$	_	_	-0.1	$\mu$ <b>A</b>
DC Current Gain	$_{ m h_{FE}(1)}$	$V_{CE} = -2V, I_{C} = -100 \text{mA}$	100	_	300	
	$_{ m h_{FE}(2)}$	$V_{CE} = -2V, I_{C} = -300 \text{mA}$	35	_	_	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	$I_{C} = -300 \text{mA}, I_{B} = -30 \text{mA}$	_	-0.2	-0.5	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -2V, I_{C} = -100 \text{mA}$	_	-0.8	-1.0	V
Transition Frequency	$ m f_{T}$	$V_{CE} = -6V, I_{C} = -20mA$	_	200	_	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -6V, I_{E} = 0, f = 1MHz$	_	9	_	pF

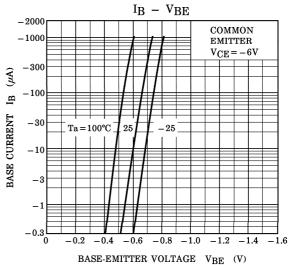
1 2001-05-24

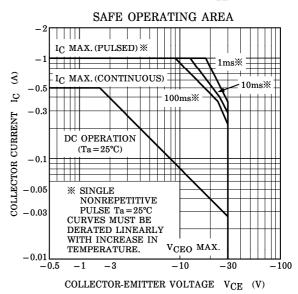












2 2001-05-24

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000707EAA

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