Unit in mm

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER APPLICATIONS.

High Voltage:  $V_{CEO} = -120V$ 

Excellent hff Linearity

:  $h_{FE} (I_C = -0.1 \text{mA}) / h_{FE} (I_C = -2 \text{mA}) = 0.95 \text{ (Typ.)}$ 

High hff  $h_{FE} = 200 \sim 700$ 

Low Noise : NF = 1dB (Typ.), 10dB (Max.)

Complementary to 2SC4117

Small Package

## MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$v_{CBO}$	-120	V
Collector-Emitter Voltage	$v_{CEO}$	-120	V
Emitter-Base Voltage	$V_{ m EBO}$	-5	V
Collector Current	$\mathbf{I}_{\mathbf{C}}$	-100	mA
Base Current	$I_{ m B}$	-20	mA
Collector Power Dissipation	PC	100	mW
Junction Temperature	Tj	125	°C
Storage Temperature Range	$T_{ m stg}$	-55~125	°C

 $2.1 \pm 0.1$  $1.25 \pm 0.1$  $2.0\pm0.2$  $0 \sim 0.1$ 1. BASE

**EMITTER** 

COLLECTOR

**JEDEC EIAJ** SC-70 TOSHIBA 2-2E1A

Weight: 0.006g

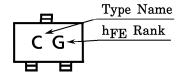
## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -120V, I_E = 0$	_	_	-0.1	$\mu$ <b>A</b>
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	_	_	-0.1	$\mu$ A
DC Current Gain	hFE (Note)	$V_{CE} = -6V, I_{C} = -2mA$	200	_	700	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_C = -10 \text{mA}, I_B = -1 \text{mA}$	_	_	-0.3	V
Transition Frequency	${ m fT}$	$V_{CE} = -6V, I_{C} = -1mA$	<u> </u>	100	<u> </u>	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$	_	4	_	pF
Noise Figure	NF	$V_{\mathrm{CE}}$ = -6V, $I_{\mathrm{C}}$ = -0.1mA, $f$ = 1kHz, $R_{\mathrm{g}}$ = 10k $\Omega$		1.0	10	dB

Note: hff. Classification  $GR(G): 200\sim400$  BL(L):  $350\sim700$ 

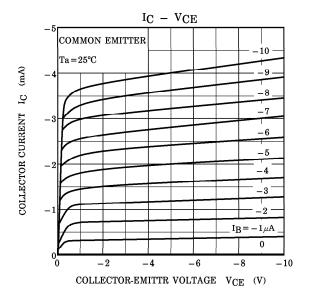
( ) Marking Symbol

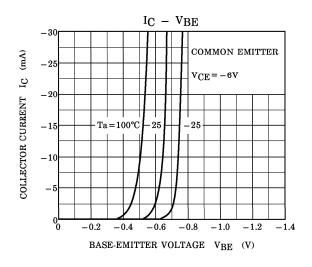
MARKING

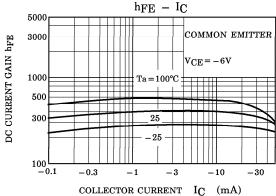


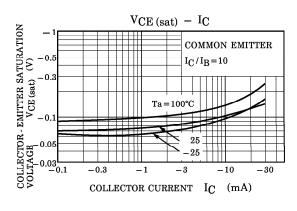
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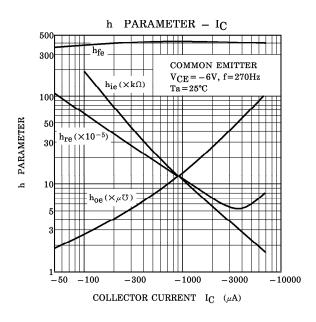
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