Unit in mm

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2 S C 5 1 9 7

POWER AMPLIFIER APPLICATIONS

- Complementary to 2SA1940
- Recommend for 55W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Tc = 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	$I_{\mathbf{C}}$	8	A
Base Current	I _B	0.8	A
Collector Power Dissipation (Tc=25°C)	PC	80	w
Junction Temperature	T_{j}	150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

15.9MAX. Ø3.2±0.2 0.0+0.3 1.0-0.25 5.45±0.2 0.0±0.3

- 1. BASE
- 2. COLLECTOR (HEAT SINK)
- 3. EMITTER

JEDEC —
JEITA —
TOSHIBA 2-16C1A

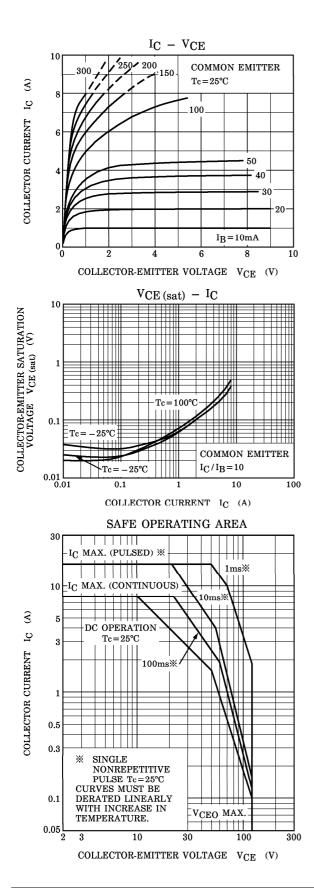
Weight: 4.7g (Typ.)

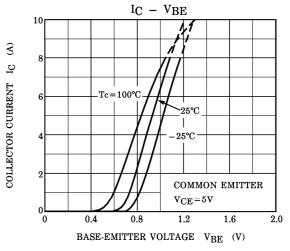
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

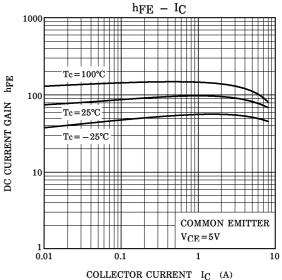
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 120V, I_{E} = 0$	_	_	5.0	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB}=5V, I_{C}=0$	_	_	5.0	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\rm C} = 50 {\rm mA}, \ I_{\rm B} = 0$	120	_	_	v
DC Current Gain	hFE (1) (Note)	$V_{\rm CE}$ =5V, I _C =1A	55	_	160	
	h _{FE (2)}	$V_{CE}=5V, I_{C}=4A$	35	75	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C}$ =6A, $I_{\rm B}$ =0.6A	_	0.35	2.0	V
Base-Emitter Voltage	$V_{ m BE}$	$V_{CE}=5V, I_{C}=4A$	_	0.95	1.5	V
Transition Frequency	$ m f_{T}$	$V_{CE}=5V, I_{C}=1A$	_	30		MHz
Collector Output Capacitance	$C_{ m ob}$	$V_{CB} = 10V, I_{E} = 0, f = 1MHz$	_	120	_	pF

(Note): $h_{FE(1)}$ Classification R: 55~110, O: 80~160

1 2001-11-05







2 2001-11-05

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000707EAA

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