TOSHIBA

Unit in mm

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2 S C 1 6 2 7

DRIVER STAGE AMPLIFIER APPLICATIONS VOLTAGE AMPLIFIER APPLICATIONS

- Complementary to 2SA817
- Driver Stage Application of 20 to 25 Watts Amplifiers.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	v_{CBO}	80	V
Collector-Emitter Voltage	v_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	$I_{\mathbf{C}}$	300	mA
Base Current	I_{B}	60	mA
Collector Power Dissipation	PC	600	mW
Junction Temperature	Tj	150	°C
Storage Temperature Range	${f T}_{ m stg}$	-55~125	$^{\circ}\mathrm{C}$

1. EMITTER 2. COLLECTOR 3. BASE JEDEC TO-92 EIAJ SC-43 TOSHIBA 2-5F1B

Weight: 0.21g

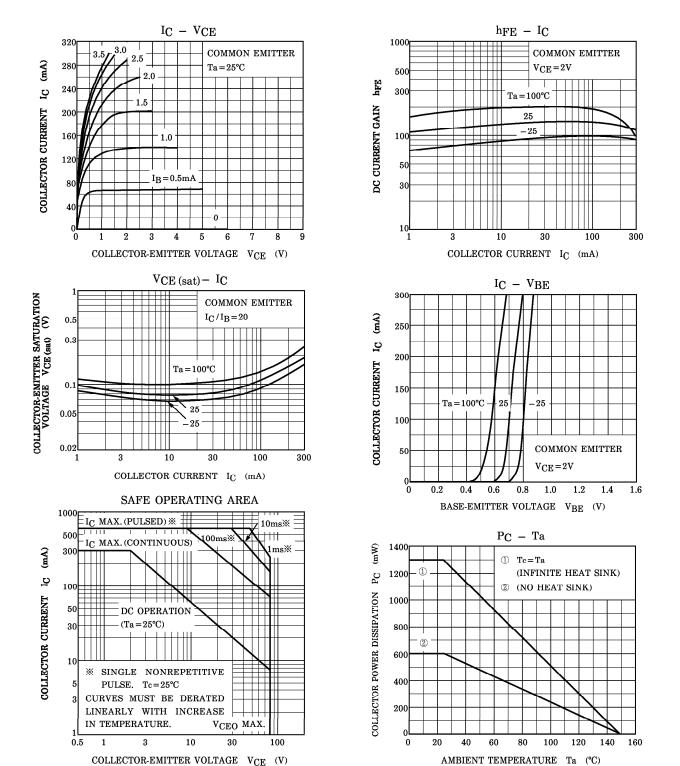
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

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CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CBO}	$V_{CB} = 50V, I_{E} = 0$	_		0.1	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB}=5V, I_C=0$			0.1	μ A
Collector-Emitter Saturation Voltage	V (BR) CEO	$I_C=5mA$, $I_B=0$	80	_	_	V
DC Current Gain	h _{FE (1)} (Note)	$V_{CE}=2V$, $I_{C}=50mA$	70	_	240	
	h _{FE (2)}	$V_{CE} = 2V, I_{C} = 200 \text{mA}$	40	_	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{C} = 200 \text{mA}, I_{B} = 10 \text{mA}$	_	_	0.5	V
Base-Emitter Voltage	$V_{ m BE}$	$V_{CE}=2V, I_{C}=5mA$	0.55	_	0.8	V
Transition Frequency	$ m f_{T}$	$V_{CE} = 10V, I_{C} = 10mA$	_	100	_	MHz
Collector Output Capacitance	C _{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	_	10	_	рF

Note: $h_{FE(1)}$ Classification $0:70\sim140$, $Y:120\sim240$

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