TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE

2 S C 2 3 8 3

COLOR TV VERT. DEFLECTION OUTPUT APPLICATIONS COLOR TV CLASS B SOUND OUTPUT APPLICATIONS

- High Voltage : $V_{CEO} = 160 \text{ V}$
- Large Continuous Collector Current Capability.
- Recommended for Vert. Deflection Output & Sound Output Applications for Line Operated TV.
- Complementary to 2SA1013

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CBO}	160	V
Collector-Emitter Voltage	v_{CEO}	160	V
Emitter-Base Voltage	$V_{ m EBO}$	6	V
Collector Current	$I_{\mathbf{C}}$	1	A
Base Current	$I_{\mathbf{B}}$	0.5	A
Collector Power Dissipation	PC	900	mW
Junction Temperature	T_{j}	150	$^{\circ}\mathrm{C}$
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

Unit in mm 5.1 MAX 0.75MAX 1.0MAX 0.8MAX 0.6MAX **EMITTER** 2. **COLLECTOR** BASE 3. **JEDEC** TO-92MOD **JEITA** TOSHIBA 2-5J1A

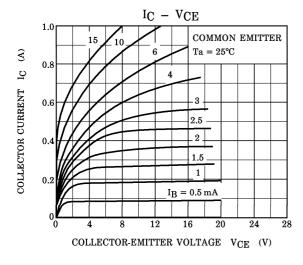
Weight: 0.36 g (Typ.)

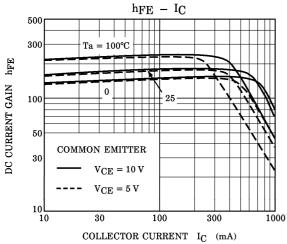
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

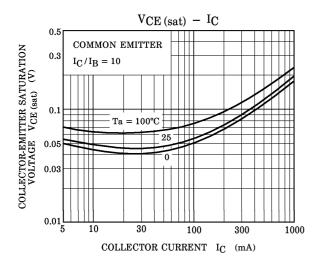
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	ICBO	$V_{CB} = 150 \text{ V}, I_{E} = 0$	_	_	1.0	μ A
Emitter Cut-off Current	I _{EBO}	$V_{EB} = 6 \text{ V}, I_{C} = 0$	_	_	1.0	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\mathrm{C}}=10\mathrm{mA},~I_{\mathrm{B}}=0$	160	_	_	V
DC Current Gain	h _{FE} (Note)	$V_{CE} = 5 \text{ V}, I_{C} = 200 \text{ mA}$	60	_	320	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C} = 500 {\rm mA}, \; I_{\rm B} = 50 {\rm mA}$	_	_	1.5	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = 5 \text{ V}, I_{C} = 5 \text{ mA}$	0.45	_	0.75	V
Transition Frequency	${ m f_T}$	$V_{CE} = 5 \text{ V}, I_{C} = 200 \text{ mA}$	20	100	_	MHz
Collector Output Capacitance	C _{ob}	$egin{aligned} { m V}_{ m CB} &= 10 \ { m V}, \ { m I}_{ m E} &= 0, \ { m f} &= 1 \ { m MHz} \end{aligned}$	_	_	20	pF

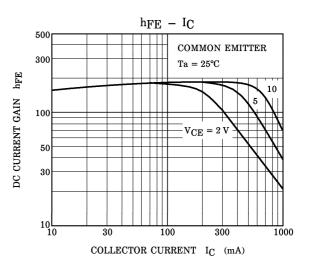
(Note) : hFE Classification $R:60{\sim}120,~O:100{\sim}200,~Y:160{\sim}320$

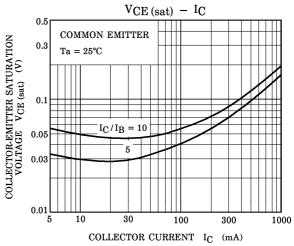
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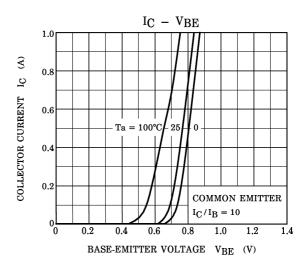




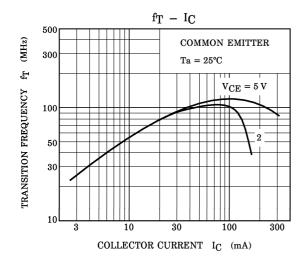


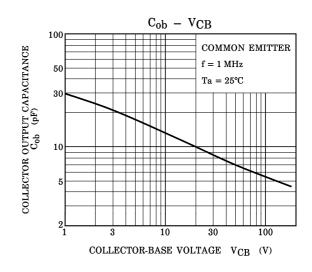


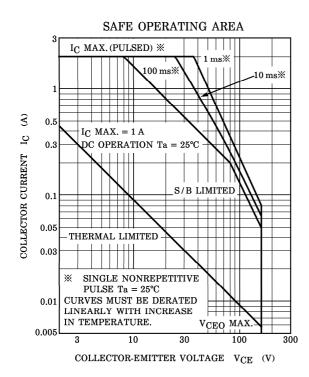




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