TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

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HIGH VOLTAGE SWITCHING AND AMPLIFIER APPLICATIONS
COLOR TV HORIZ. DRIVER APPLICATIONS
COLOR TV CHROMA OUTPUT APPLICATIONS

• High Voltage : V_{(BR) CEO} = 300V

• Small Collector Output Capacitance : Cob=3.0pF (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CBO}	300	V
Collector-Emitter Voltage	v_{CEO}	300	V
Emitter-Base Voltage	$v_{ m EBO}$	7	V
Collector Current	$I_{\mathbf{C}}$	100	mA
Base Current	$I_{\mathbf{B}}$	50	mA
Collector Power Dissipation	$P_{\mathbf{C}}$	900	mW
Junction Temperature	$\mathbf{T_{j}}$	150	°C
Storage Temperature Range	${ m T_{stg}}$	-55~150	°C

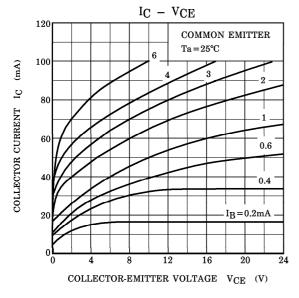
	Unit in mm		
0.75MAX.	8.2MAX.		
1.0MAX. 0.8MAX. 0.6MAX. 1.27 1 2 3 2.54	0.06MAX. 2.2MAX. 10.5MIN. XX.		
1. EMITTER 2. COLLECTOR 3. BASE	4.1MAX.		
JEDEC TO-	92MOD		
JEITA	_		
TOSHIBA 2-	5J1A		

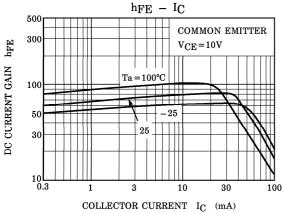
Weight: 0.36g (Typ.)

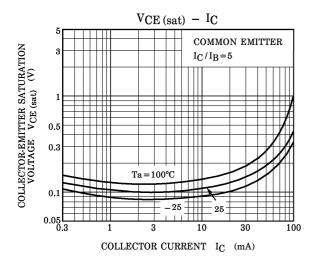
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

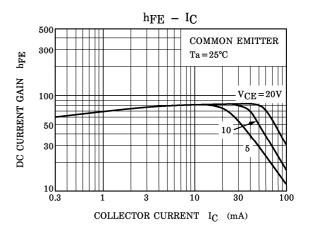
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	ICBO	$V_{CB} = 240V, I_{E} = 0$	_	_	1.0	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB}=7V, I_{C}=0$	_	_	1.0	μ A
DC Current Gain	$h_{FE(1)}$ $V_{CE}=10V$, $I_{C}=4mA$	$V_{\text{CE}} = 10V, I_{\text{C}} = 4\text{mA}$	20	_	_	
	h _{FE} (2)	$V_{\text{CE}} = 10V, I_{\text{C}} = 20\text{mA}$	30	_	150	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C}$ =10mA, $I_{\rm B}$ =1mA	-	_	1.0	V
Base-Emitter Saturation Voltage	V _{BE (sat)}	$I_C=10$ mA, $I_B=1$ mA	_	_	1.0	V
Transition Frequency	$ m f_T$	$V_{\text{CE}} = 10V, I_{\text{C}} = 20\text{mA}$	50	_	_	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 20V, I_{E} = 0, f = 1MHz$	_	3.0	_	pF

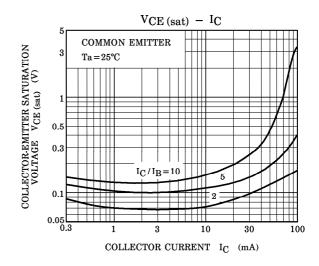
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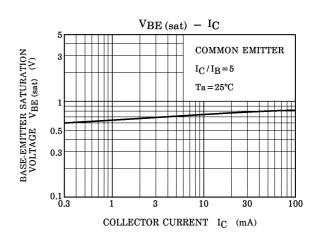




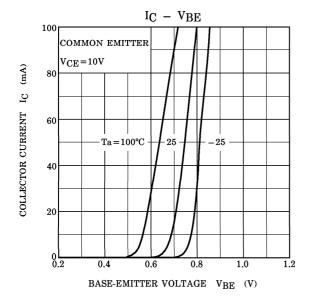


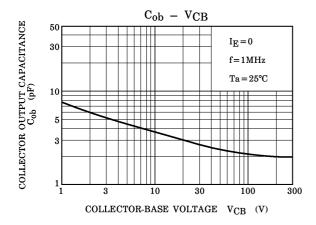


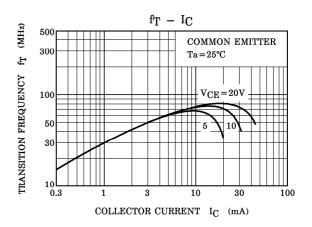


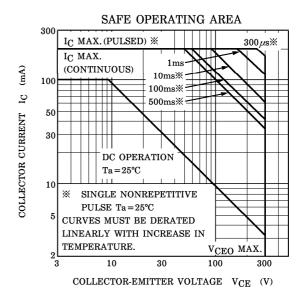


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