Unit in mm

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

# 2 S A 1 3 2 0

## HIGH VOLTAGE SWITCHING APPLICATIONS

COLOR TV CHROMA OUTPUT APPLICATIONS

• High Voltage :  $V_{CEO} = -250V$ 

• Low  $C_{re}$  : 1.8pF (Max.)

• Complementary to 2SC3333

## MAXIMUM RATINGS (Ta = 25°C)

	CONTRACTOR CONTRACTOR DAMPAGE LINES				
CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		$v_{\mathrm{CBO}}$	-250	V	
Collector-Emitter Voltage		$v_{CEO}$	-250	V	
Emitter-Base Voltage		$v_{\mathrm{EBO}}$	<b>-</b> 5	_5 V	
Collector Current	DC	$I_{\mathbf{C}}$	-50	mA	
	Pulsed	$I_{CP}$	-100		
Base Current		$I_{\mathrm{B}}$	-20	mA	
Collector Power Dissipation		$P_{\mathbf{C}}$	0.6	w	
Junction Temperature		$T_{j}$	150	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	-55~150	°C	

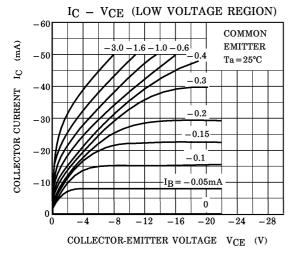
1. EMITTER 2. COLLECTOR 3. BASE JEDEC TO-92 EIAJ SC-43 TOSHIBA 2-5F1B

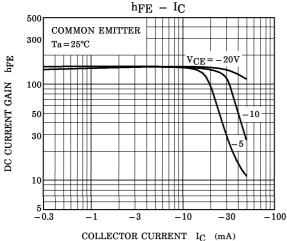
Weight: 0.21g

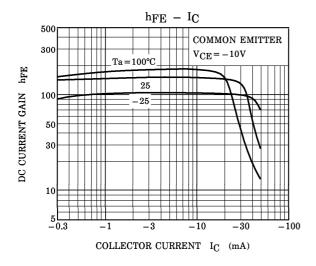
### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

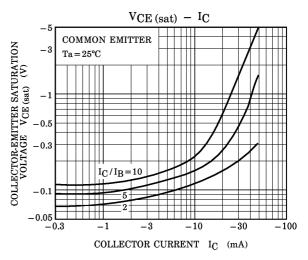
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -200V, I_E = 0$	_	_	-0.1	$\mu$ A
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	_	_	-0.1	$\mu$ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{C} = -1 \text{mA}, I_{B} = 0$	-250	_	_	V
DC Current Gain	${ m h_{FE}}$	$V_{CE} = -20V, I_{C} = -25mA$	50	_	_	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_C = -10 \text{mA}, I_B = -1 \text{mA}$	_	_	-1.5	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -20V, I_{C} = -25mA$	_	-0.75	_	V
Transition Frequency	$\mathbf{f_T}$	$V_{CE} = -10V, I_{C} = -10mA$	60	80	_	MHz
Reverse Transfer Capacitance	$\mathrm{C_{re}}$	$V_{CB} = -30V, I_E = 0, f = 1MHz$			1.8	pF

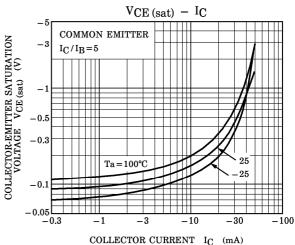
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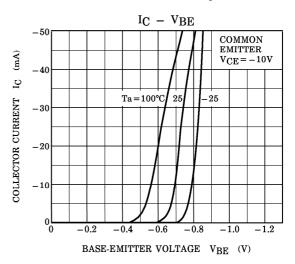




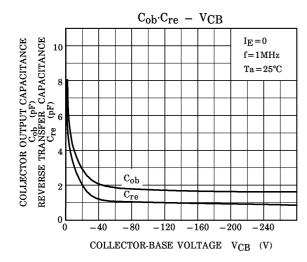


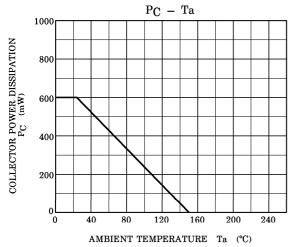


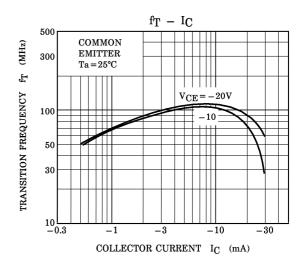


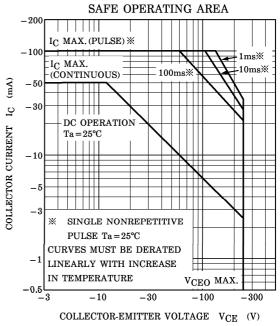


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