TOSHIBA Transistor Silicon NPN Triple Diffused Type (PCT process)

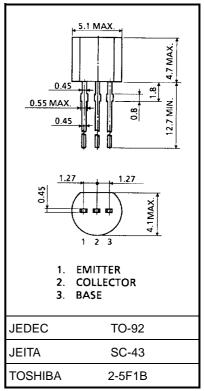
2SC3333

High Voltage Switching Applications Color TV Chroma Output Applications

- High voltage: V_{CEO} = 250 V
- Low C_{re}: 1.8 pF (max)
- Complementary to 2SA1320

Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit	
Collector-base voltage		V _{CBO}	250	V	
Collector-emitter voltage		V _{CEO}	250	V	
Emitter-base voltage		V _{EBO}	5	V	
Collector current	DC	Ι _C	50	mA	
	Pulsed	I _{CP}	100		
Base current		Ι _Β	20	mA	
Collector power dissipation		P _C	0.6	W	
Junction temperature		Tj	150	°C	
Storage temperature range		T _{stg}	-55~150	°C	



Electrical Characteristics (Ta = 25°C)

Weight: 0.21 g (typ.)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	$V_{CB} = 200 \text{ V}, I_E = 0$			0.1	μA
Emitter cut-off current	I _{EBO}	$V_{EB} = 5 V, I_C = 0$	_	_	0.1	μA
Collector-emitter breakdown voltage	V (BR) CEO	$I_C = 1 \text{ mA}, I_B = 0$	250		_	V
DC current gain	h _{FE}	$V_{CE} = 20 \text{ V}, \text{ I}_{C} = 25 \text{ mA}$	50		_	
Collector-emitter saturation voltage	V _{CE (sat)}	$I_{C} = 10 \text{ mA}, I_{B} = 1 \text{ mA}$			1.5	V
Base-emitter voltage	V _{BE}	$V_{CE} = 20 \text{ V}, \text{ I}_{C} = 25 \text{ mA}$		0.75	_	V
Transition frequency	f _T	$V_{CE} = 10 \text{ V}, \text{ I}_{C} = 10 \text{ mA}$	60	100		MHz
Reverse transfer capacitance	C _{re}	$V_{CB} = 30 \text{ V}, \text{ I}_{E} = 0, \text{ f} = 1 \text{ MHz}$			1.8	pF

COMMON EMITTER

30

30

100

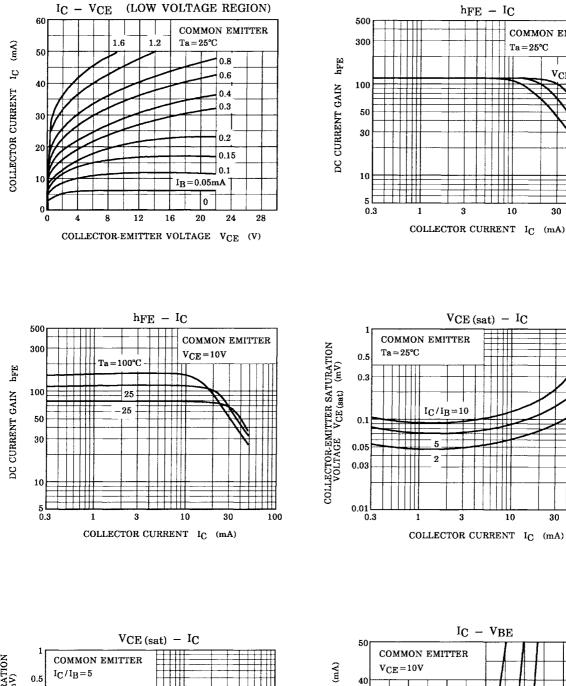
100

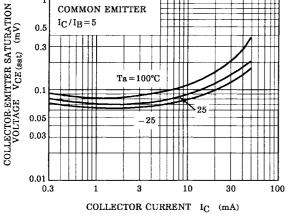
ТПП

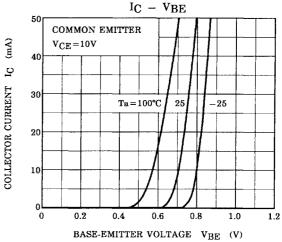
 $V_{CE} = 20V$

Ta=25°C

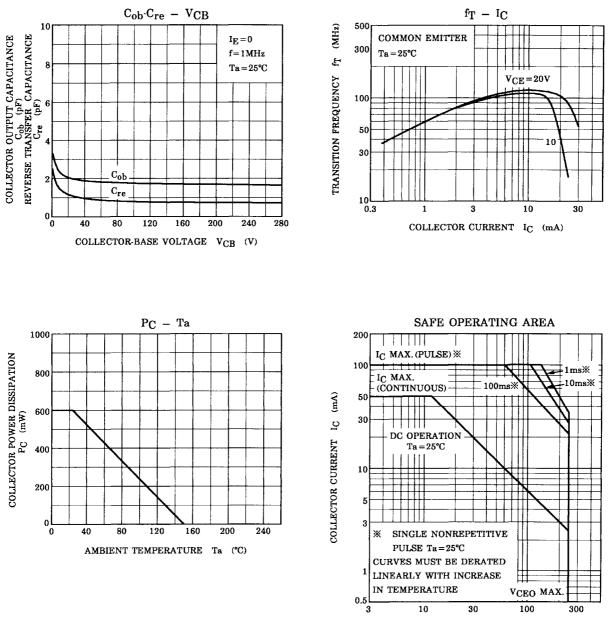
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Collector-emitter voltage v_{CE} (v)

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Handbook" etc.,

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