TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED MESA TYPE

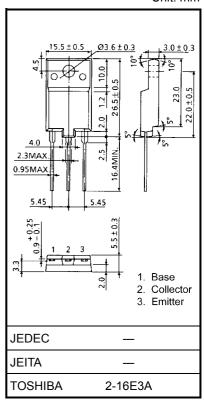
2SC5588

HORIZONTAL DEFLECTION OUTPUT FOR SUPER HIGH RESOLUTION DISPLAY COLOR TV FOR DIGITAL TV & HDTV HIGH SPEED SWITCHING APPLICATIONS

- High Voltage : $V_{CBO} = 1700 V$
- Low Saturation Voltage : VCE (sat) = 3 V (Max.)
- High Speed : $t_f(2) = 0.1 \mu s$ (Typ.)

MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		V _{CBO}	1700	V	
Collector-Emitter Voltage		V _{CEO}	800	V	
Emitter-Base Voltage		V _{EBO}	5	V	
Collector Current	DC	Ι _C	15	A	
	Pulse	I _{CP}	30		
Base Current		I _B	7.5	А	
Collector Power Dissipation		P _C	75	W	
Junction Temperature		Tj	150	°C	
Storage Temperature Range		T _{stg}	-55~150	°C	

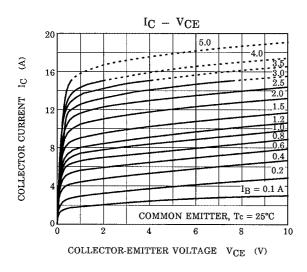


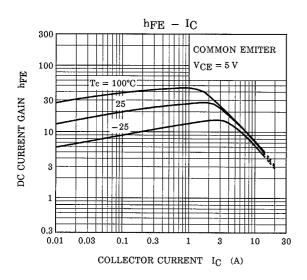
Weight: 5.5 g (typ.)

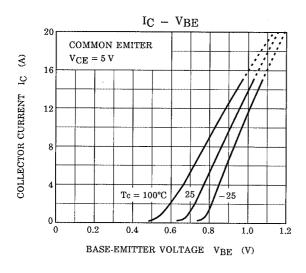
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Collector Cut-off Current		I _{CBO}	V _{CB} = 1700 V, I _E = 0	_	_	1	mA
Emitter Cut-off Current		I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	100	μA
Emitter-Base Breakdown Voltage		V (BR) CEO	I _C = 10 mA, I _B = 0	800	_	_	V
DC Current Gain		h _{FE (1)}	V _{CE} = 5 V, I _C = 2 A	22	_	45	
		h _{FE (2)}	V _{CE} = 5 V, I _C = 9 A	6.5	_	12	
		h _{FE (3)}	V _{CE} = 5 V, I _C = 12 A	4.8	_	8.0	
Collector-Emitter Saturation Voltage		V _{CE (sat)}	I _C = 12 A, I _B = 3 A	_	_	3	V
Base-Emitter Saturation Voltage		V _{BE (sat)}	I _C = 12 A, I _B = 3 A	_	1.0	1.5	V
Transition Frequency		fT	V _{CE} = 10 V, I _C = 0.1 A	_	2	_	MHz
Collector Output Capacitance		C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	240	_	pF
Switching Time	Storage Time	t _{stg (1)}	I _{CP} = 9 A, I _{B1} (end) = 1.1 A	_	3.5	4	μs
	Fall Time	tf (1)	f _H = 32 kHz	_	0.25	0.35	
	Storage Time	t _{stg (2)}	I _{CP} = 6.5 A, I _{B1} (end) = 1 A	_	1.8	2	μs
	Fall Time	t _{f (2)}	f _H = 100 kHz	_	0.1	0.15	

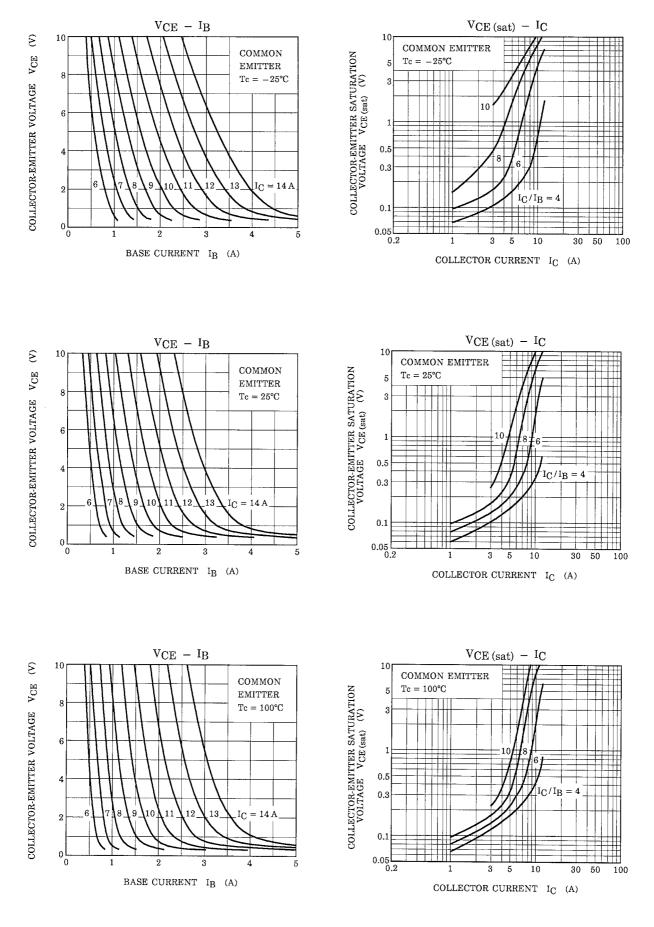
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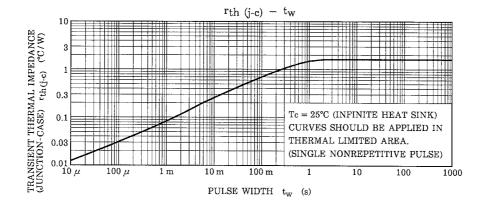


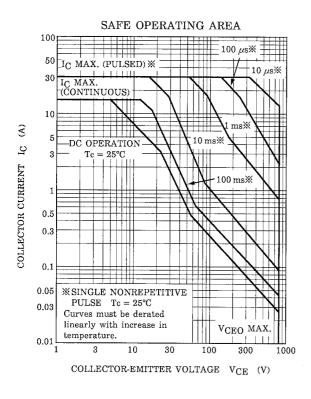


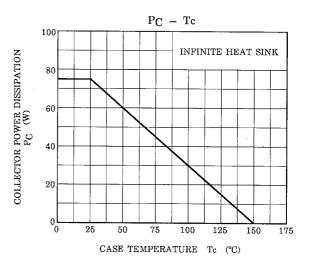
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