TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED MESA TYPE

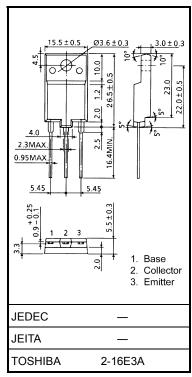
2SC5855

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

- High Voltage : VCBO = 1500 V
- Low Saturation Voltage : VCE (sat) = 3 V (max)
- High Speed : $t_{f(2)} = 0.1 \ \mu s \ (typ.)$

MAXIMUM RATINGS (Tc = 25°C)

CHARACTER	RISTIC	SYMBOL	RATING	UNIT	
Collector-Base Voltage		V _{CBO}	1500	V	
Collector-Emitter Voltage		V _{CEO}	700	V	
Emitter-Base Voltage		V _{EBO}	5	V	
Collector Current	DC	Ι _C	10	A	
	Pulse	I _{CP}	20		
Base Current		Ι _Β	5	А	
Collector Power Dissipation		P _C	50	W	
Junction Temperature		Тј	150	°C	
Storage Temperature Range		T _{stg}	-55~150	°C	



Weight: 5.5 g (typ.)

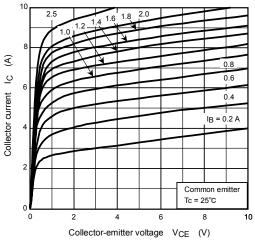
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	Min	Тур.	Max	UNIT
Collector Cut-off Current		I _{CBO}	V _{CB} = 1500 V, I _E = 0	_	—	1	mA
Emitter Cut-off Current		I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	100	μA
Collector – Emitter Breakdown Voltage		V (BR) CEO	I _C = 10 mA, I _B = 0	700	_	_	V
DC Current Gain		h _{FE (1)}	V _{CE} = 5 V, I _C = 1 A	28	_	60	
		h _{FE (2)}	V _{CE} = 5 V, I _C = 6 A	6.2	_	10	
		h _{FE (3)}	V _{CE} = 5 V, I _C = 8 A	4.3	_	6.7	
Collector-Emitter Saturation Voltage		V _{CE (sat)}	I _C = 8 A, I _B = 2 A	_	_	3	V
Base-Emitter Saturation Voltage		V _{BE (sat)}	I _C = 8 A, I _B = 2 A	-	1.0	1.4	V
Transition Frequency		f _T	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	_	120	_	pF
Switching Time	Storage Time	t _{stg(1)}	I _{CP} = 6 , I _{B1} (end) = 0.8 A	_	2.8	_	μs
	Fall Time	t _{f(1)}	$f_H = 32 \text{ kHz}$	_	0.2	—	
	Storage Time	t _{stg(2)}	I _{CP} = 5.5 A, I _{B1} (end) = 0.8 A	—	2.3	_	μs
	Fall Time	t _{f(2)}	f _H = 80 kHz	_	0.1	_	

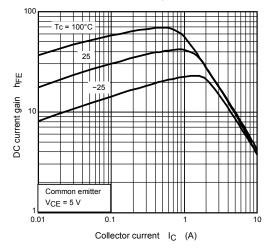
Unit: mm

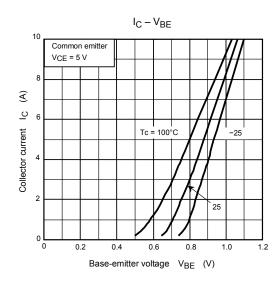
TOSHIBA

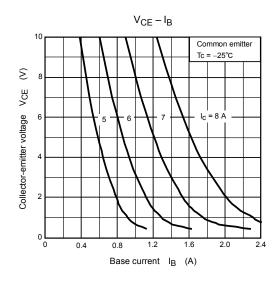


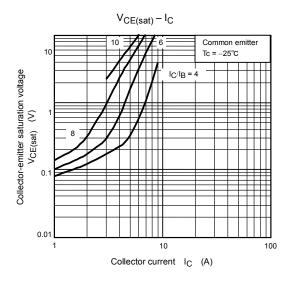


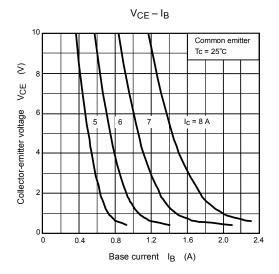




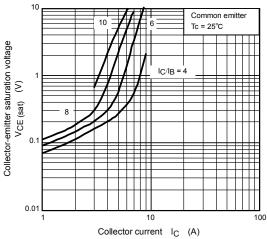


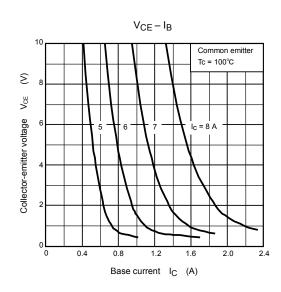


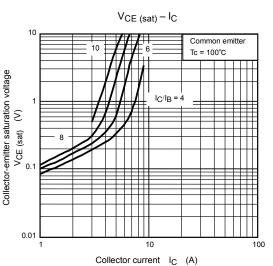


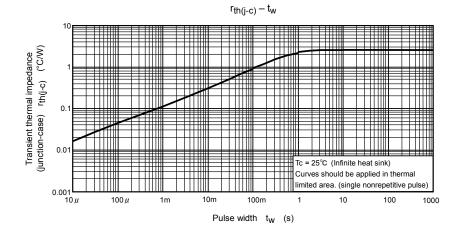


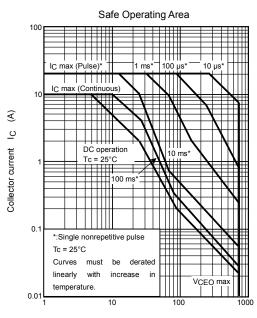


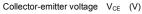


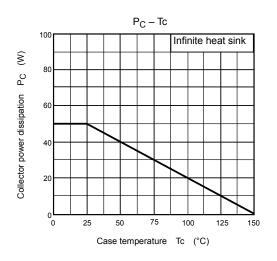




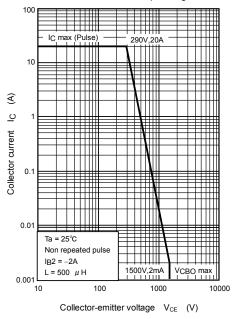








Reverse Bias - Safe Operating Area



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