Unit: mm

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED MESA TYPE

2SC5411

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

• High Voltage : $V_{CBO} = 1500 \text{ V}$ • Low Saturation Voltage : $V_{CE \text{ (sat)}} = 3 \text{ V (Max.)}$ • High Speed : $t_f = 0.15 \text{ µs (Typ.)}$

• Collector Metal (Fin) is Fully Covered with Mold Resin.

MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		V _{CBO}	1500	V	
Collector-Emitter Voltage		V _{CEO}	600	V	
Emitter-Base Voltage		V _{EBO}	5	٧	
Collector Current	DC	I _C	14	Α	
	Pulse	I _{CP}	28		
Base Current		Ι _Β	7	Α	
Collector Power Dissipation		PC	60	W	
Junction Temperature		Tj	150	°C	
Storage Temperature Range		T _{stg}	-55~150	°C	

1. Base 2. Collector 3. Emitter JEDEC — JEITA

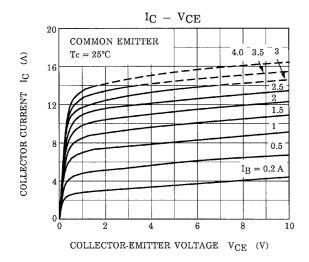
2-16E3A

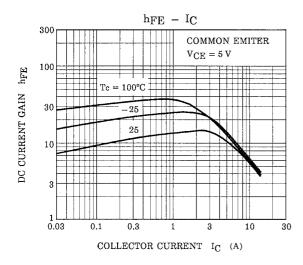
Weight: 5.5 g (typ.)

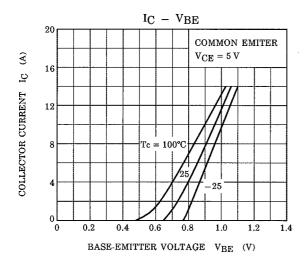
TOSHIBA

ELECTRICAL CHARACTERISTICS (Tc = 25°C)

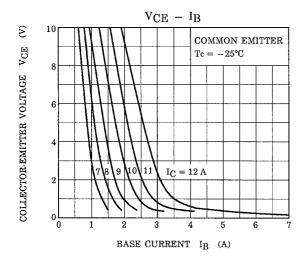
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Collector Cut-off Current		I _{CBO}	V _{CB} = 1500 V, I _E = 0	_	_	1	mA
Emitter Cut-off Current		I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	10	μA
Emitter-Base Breakdo	wn Voltage	V (BR) CEO	I _C = 10 mA, I _B = 0	600	_	_	V
DC Current Gain		h _{FE (1)}	V _{CE} = 5 V, I _C = 2 A	10	_	40	
		h _{FE (2)}	V _{CE} = 5 V, I _C = 11 A	4	_	8	
Collector-Emitter Saturation Voltage		V _{CE (sat)}	I _C = 11 A, I _B = 2.75 A	_	_	3	V
Base-Emitter Saturation Voltage		V _{BE (sat)}	I _C = 11 A, I _B = 2.75 A	_	1.0	1.5	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	_	190	_	pF
Switching Time	Storage Time	t _{stg}	I _{CP} = 8.5 A, I _{B1} (end) = 1.6 A f _H = 64 kHz	_	2.5	3.5	- µs
	Fall Time	t _f			0.15	0.3	

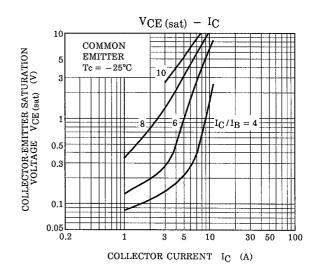


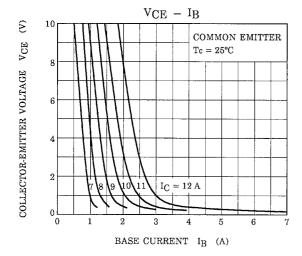


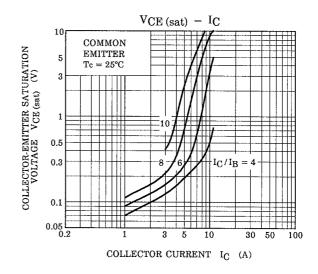


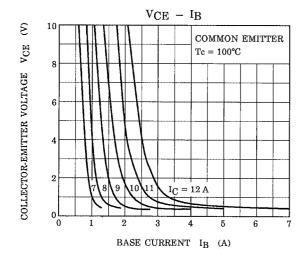
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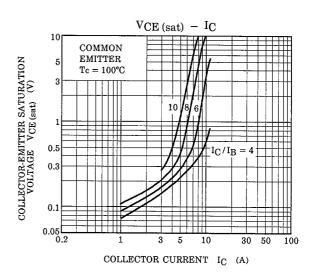




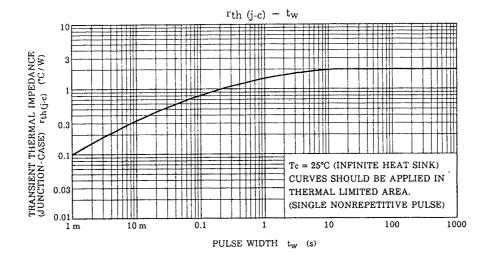


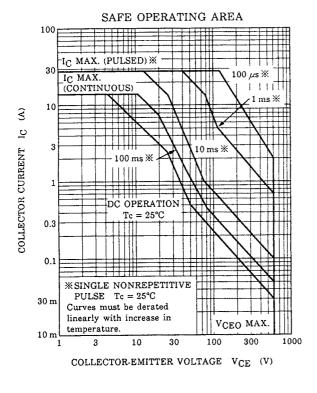


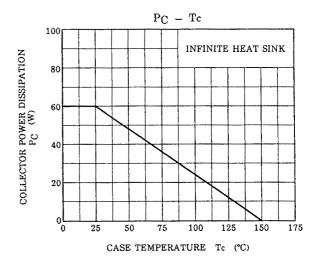




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