TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED MESA TYPE

2SC5404

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

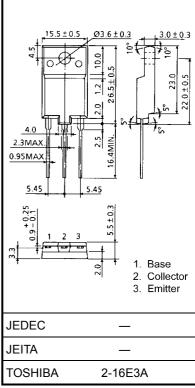
• High Voltage $: V_{CBO} = 1500 \text{ V}$ Low Saturation Voltage : $V_{CE (sat)} = 3 V (Max.)$ High Speed : $t_f = 0.15 \mu s$ (Typ.)

• 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	V	
Collector Current	DC	IC	9	Α	
	Pulse	I _{CP}	18		
Base Current		ΙΒ	4.5	А	
Collector Power Dissipation		PC	50	W	
Junction Temperature		Tj	150	°C	
Storage Temperature Range		T _{stg}	-55~150	°C	

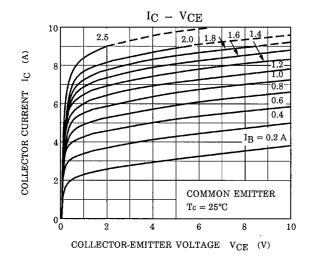
Unit: mm

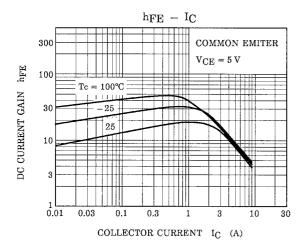


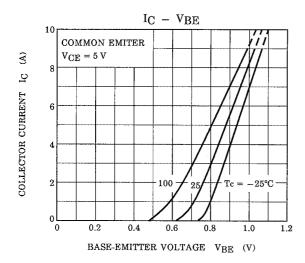
Weight: 5.5 g (typ.)

ELECTRICAL CHARACTERISTICS (Tc = 25°C)

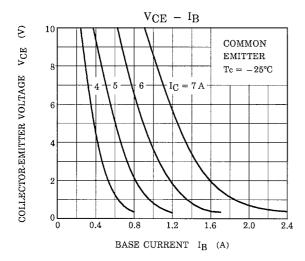
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT	
Collector Cut-off Current		I _{CBO}	V _{CB} = 1500 V, I _E = 0	_	_	1	mA	
Emitter Cut-off Current		I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	10	μA	
Emitter-Base Breakd	own Voltage	V (BR) CEO	I _C = 10 mA, I _B = 0	600	_	_	V	
DC Current Gain		h _{FE (1)}	V _{CE} = 5 V, I _C = 1 A	10	_	40		
		h _{FE (2)}	V _{CE} = 5 V, I _C = 7 A	4	_	8		
Collector-Emitter Saturation Voltage		V _{CE (sat)}	I _C = 7 A, I _B = 1.75 A	_	_	3	V	
Base-Emitter Saturation Voltage		V _{BE (sat)}	I _C = 7 A, I _B = 1.75 A	_	1.0	1.5	V	
Transition Frequency		f _T	V _{CE} = 10 V, I _C = 0.1 A	_	2.5	_	MHz	
Collector Output Capacitance		C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	115	_	pF	
Switching Time	Storage Time	t _{stg}	I _{CP} = 5.5 A, I _{B1} (end) = 1.1 A f _H = 64 kHz	_	2.5	3.5	μs	
	Fall Time	t _f		_	0.15	0.3		

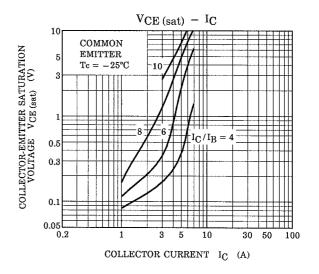


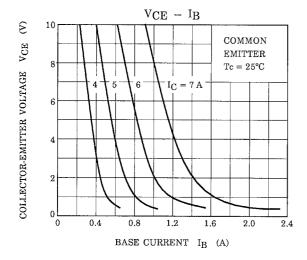


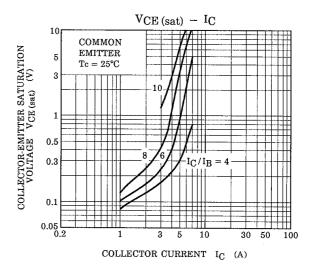


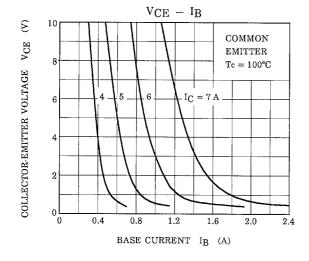
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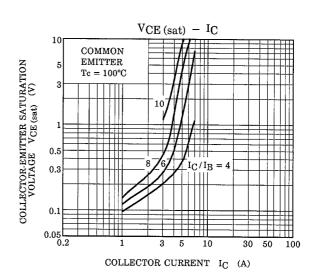




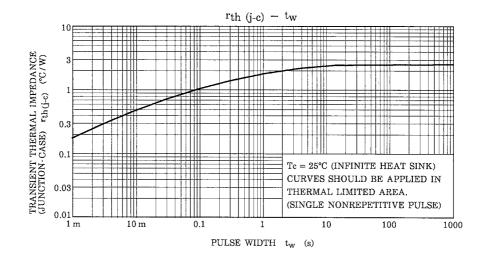


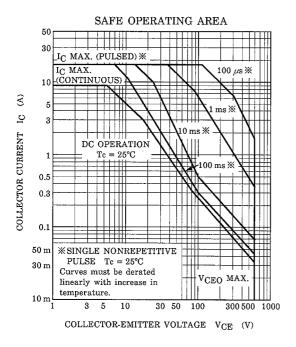


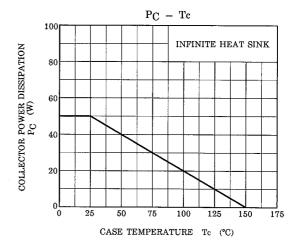




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