

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED MESA TYPE

2SC5404HORIZONTAL DEFLECTION OUTPUT FOR HIGH RESOLUTION
DISPLAY, COLOR TV

HIGH SPEED SWITCHING APPLICATIONS

- High Speed : $t_f = 0.15 \mu s$ (Typ.)
- High Voltage : $V_{CBO} = 1500V$
- Low Saturation Voltage : $V_{CE(sat)} = 3V$ (Max.)
- Collector Metal (Fin) is Fully Covered with Mold Resin.

MAXIMUM RATINGS ($T_a = 25^\circ C$)

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	I_C	9	A
	Pulse	I_{CP}	18	
Base Current		I_B	4.5	A
Collector Power Dissipation ($T_c = 25^\circ C$)		P_C	50	W
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	$-55 \sim 150$	$^\circ C$

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

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

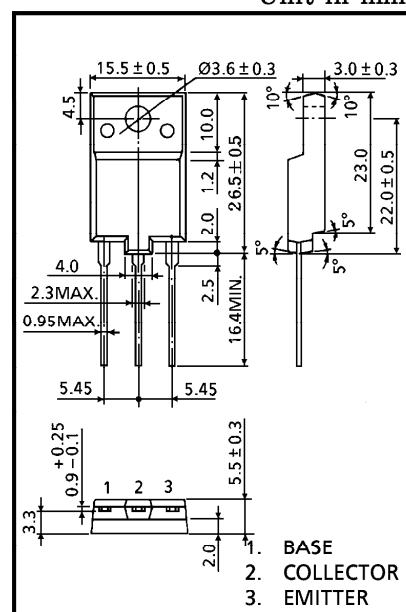
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Unit in mm



JEDEC

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TOSHIBA

2-16E3A

Weight : 5.5g (Typ.)

