

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC5266A

SWITCHING REGULATOR APPLICATIONS

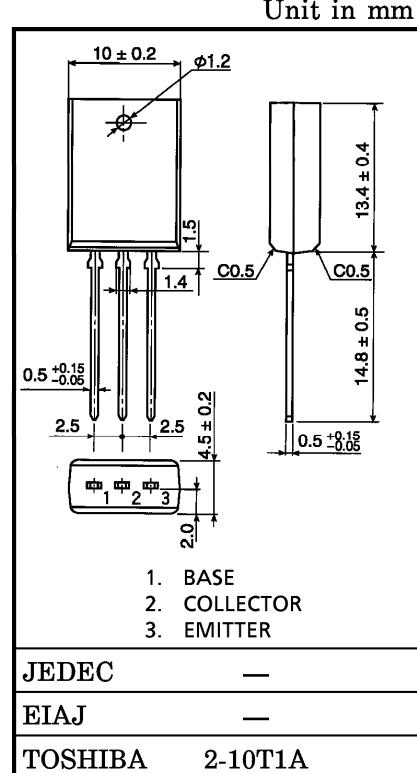
HIGH VOLTAGE SWITCHING APPLICATIONS

DC-DC CONVERTER APPLICATIONS

- Excellent Switching Times : $t_r = 0.5\mu s$ (Max.), $t_f = 0.3\mu s$ (Max.)
- High Collector Breakdown Voltage : $V_{CEO} = 400V$
- High DC Current Gain : $h_{FE} = 20$ (Min.)

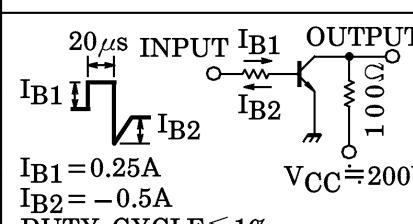
MAXIMUM RATINGS ($T_a = 25^\circ C$)

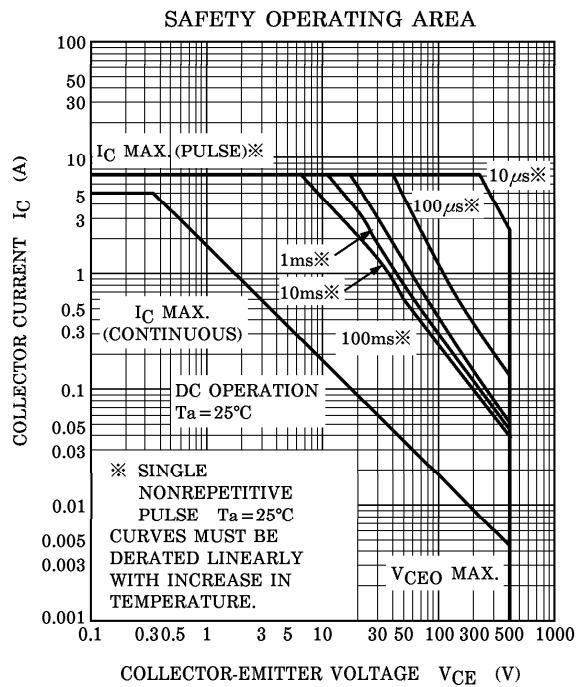
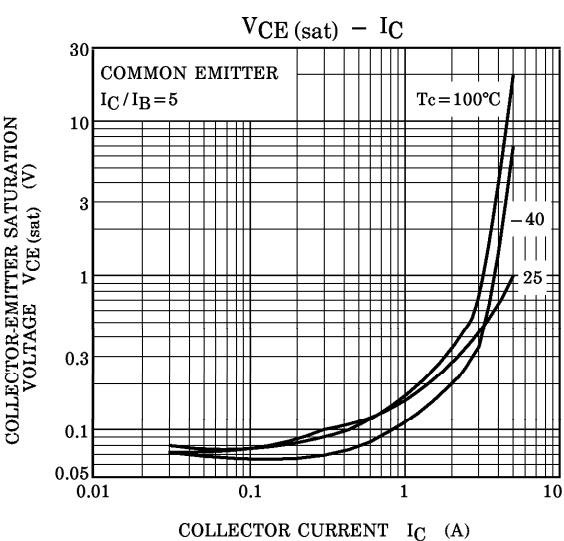
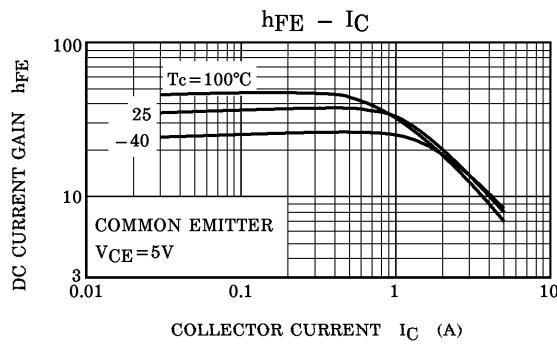
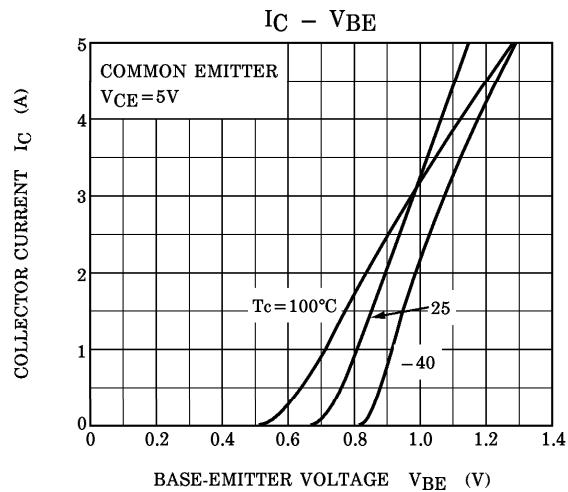
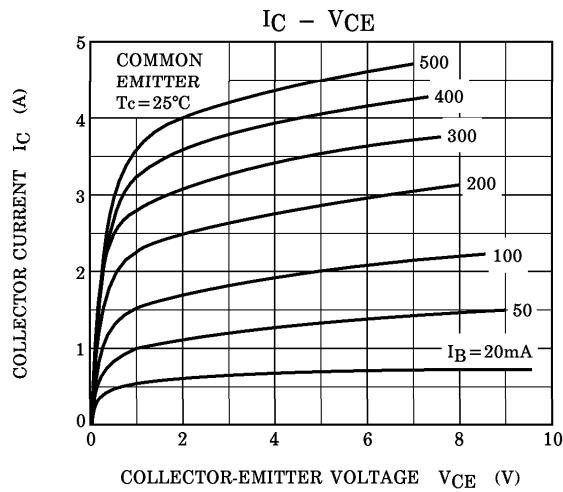
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	600	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	DC	I_C	5
	Pulse	I_{CP}	7
Base Current	I_B	2	A
Collector Power Dissipation	P_C	1.8	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	$-55 \sim 150$	$^\circ C$



Weight : 1.5g (Typ.)

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 500\text{V}$, $I_E = 0$	—	—	100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 7\text{V}$, $I_C = 0$	—	—	100	nA
Collector-Base Breakdown Voltage	$V_{(\text{BR})\text{CBO}}$	$I_C = 1\text{mA}$, $I_E = 0$	600	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(\text{BR})\text{CEO}}$	$I_C = 10\text{mA}$, $I_B = 0$	400	—	—	V
DC Current Gain	h_{FE} (1)	$V_{CE} = 5\text{V}$, $I_C = 1\text{mA}$	13	—	—	
	h_{FE} (2)	$V_{CE} = 5\text{V}$, $I_C = 0.5\text{A}$	20	—	65	
Collector-Emitter Saturation Voltage	$V_{CE(\text{sat})}$	$I_C = 2\text{A}$, $I_B = 0.25\text{A}$	—	—	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(\text{sat})}$	$I_C = 2\text{A}$, $I_B = 0.25\text{A}$	—	—	1.3	V
Switching Time	Turn-on Time	t_{on}	 $I_{B1} = 0.25\text{A}$ $I_{B2} = -0.5\text{A}$ DUTY CYCLE $\leq 1\%$	—	—	0.5
	Storage Time	t_{stg}		—	—	2.0
	Fall Time	t_f		—	—	0.3



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