

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC5549

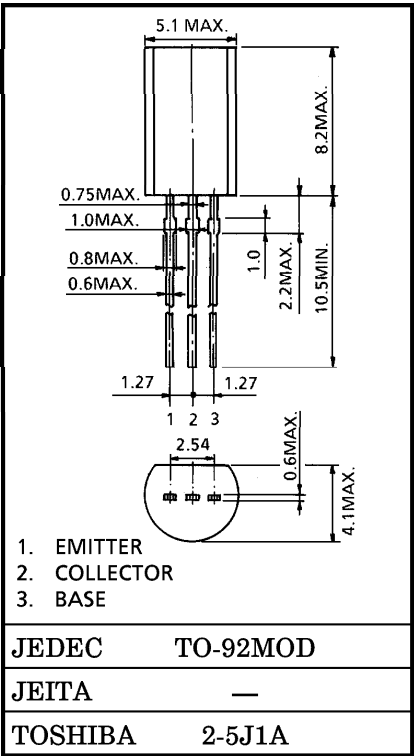
HIGH SPEED SWITCHING APPLICATION FOR INVERTER LIGHTING SYSTEM

- Suitable for R_{CC} Circuit. (Guaranteed small current h_{FE})
: $h_{FE}=13$ (Min.) ($I_C=1mA$)
- High Speed : $t_r=0.5\mu s$ (Max.), $t_f=0.3\mu s$ (Max.) ($I_C=0.24A$)
- High Voltage : $V_{CEO}=400V$

MAXIMUM RATINGS (Ta = 25°C)

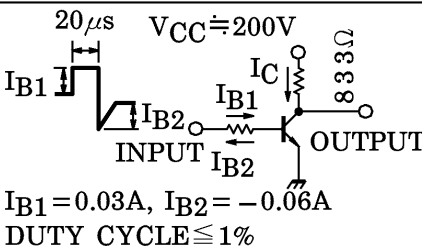
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	400	V
Collector-Emitter Voltage		V_{CEO}	400	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current	DC	I_C	1	A
	Pulse	I_{CP}	2	
Base Current		I_B	0.5	A
Collector Power Dissipation		P_C	0.9	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55~150	°C

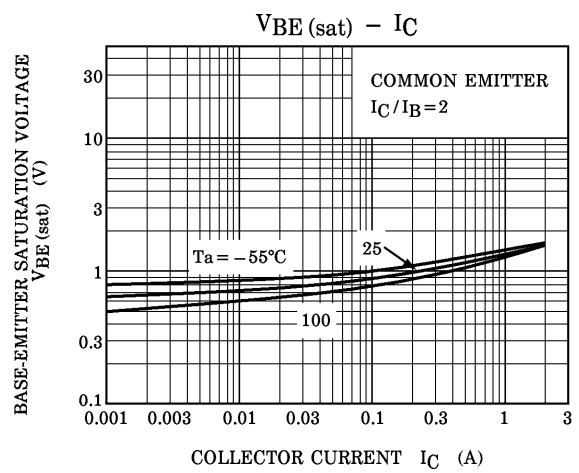
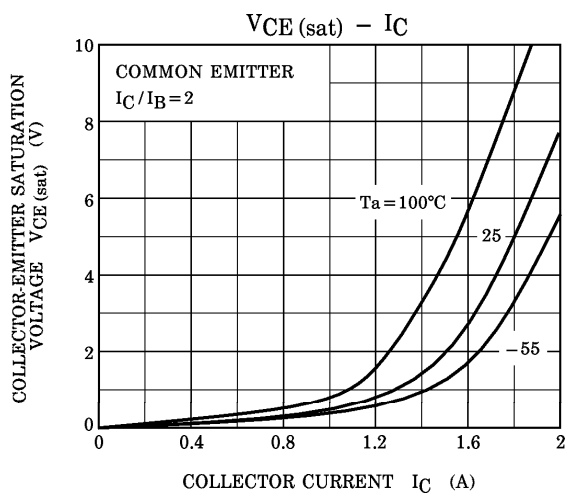
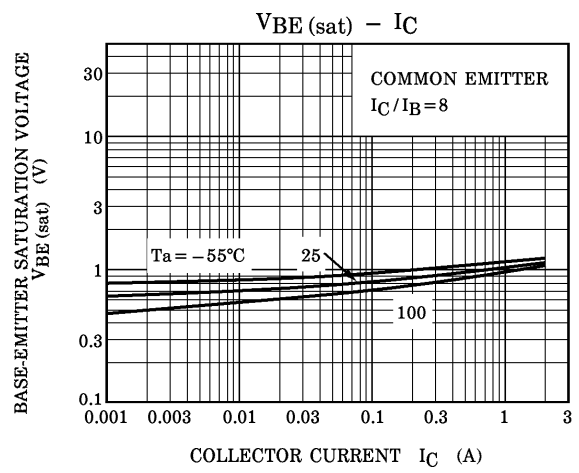
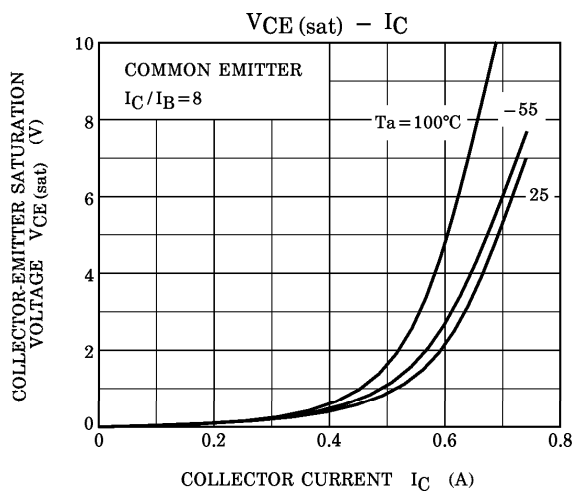
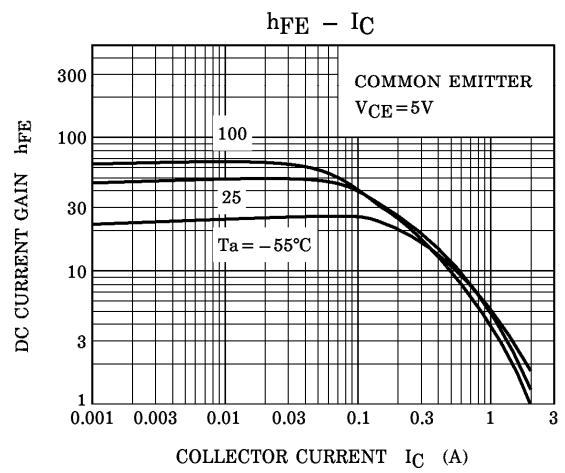
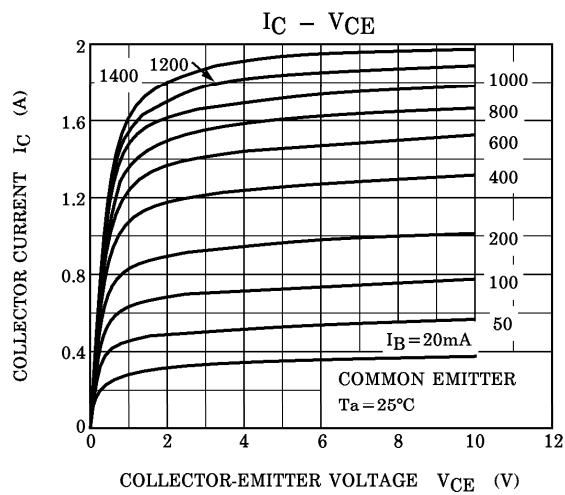
Unit in mm

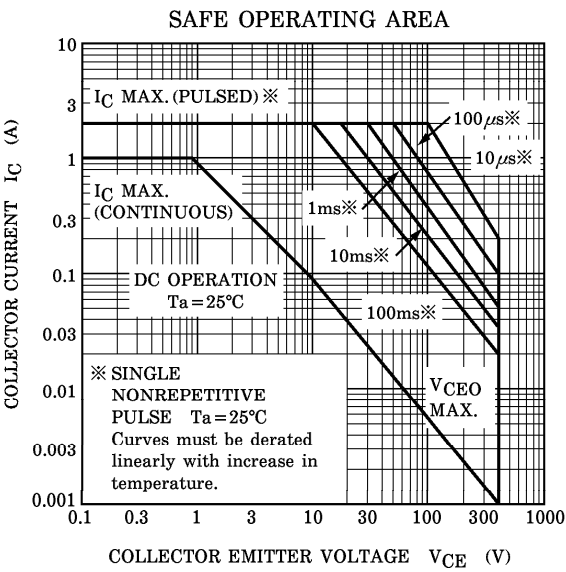
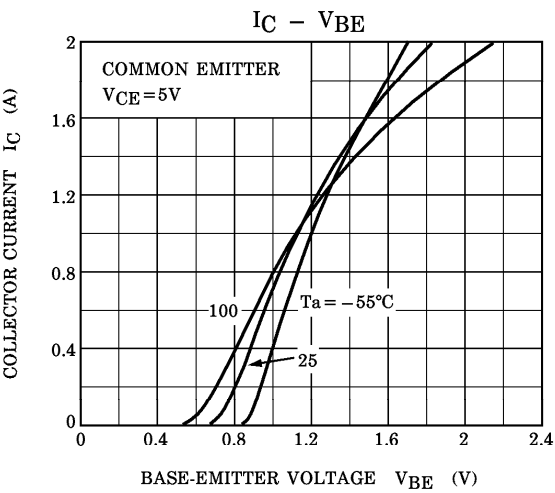


Weight : 0.36g (Typ.)

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

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = 320\text{V}$, $I_E = 0$	—	—	100	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = 7\text{V}$, $I_C = 0$	—	—	100	μA
Collector-Base Breakdown Voltage		$V_{(BR) CBO}$	$I_C = 1\text{mA}$, $I_B = 0$	400	—	—	V
Collector-Emitter Breakdown Voltage		$V_{(BR) CEO}$	$I_C = 10\text{mA}$, $I_B = 0$	400	—	—	V
DC Current Gain		$h_{FE} (1)$	$V_{CE} = 5\text{V}$, $I_C = 1\text{mA}$	13	—	—	
		$h_{FE} (2)$	$V_{CE} = 5\text{V}$, $I_C = 0.04\text{A}$	20	—	65	
Collector-Emitter Saturation Voltage		$V_{CE (sat)}$	$I_C = 0.2\text{A}$, $I_B = 25\text{mA}$	—	—	1.0	V
Base-Emitter Saturation Voltage		$V_{BE (sat)}$	$I_C = 0.2\text{A}$, $I_B = 25\text{mA}$	—	—	1.3	V
Switching Time	Rise Time	t_r	 <p> $20\mu\text{s}$ $V_{CC} \doteq 200\text{V}$ I_{B1} I_{B2} I_C 833Ω 33nF INPUT OUTPUT $I_{B1} = 0.03\text{A}$, $I_{B2} = -0.06\text{A}$ DUTY CYCLE $\leq 1\%$ </p>	—	—	0.5	μs
	Storage Time	t_{stg}		—	—	5.0	
	Fall Time	t_f		—	—	0.3	





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