

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC5550

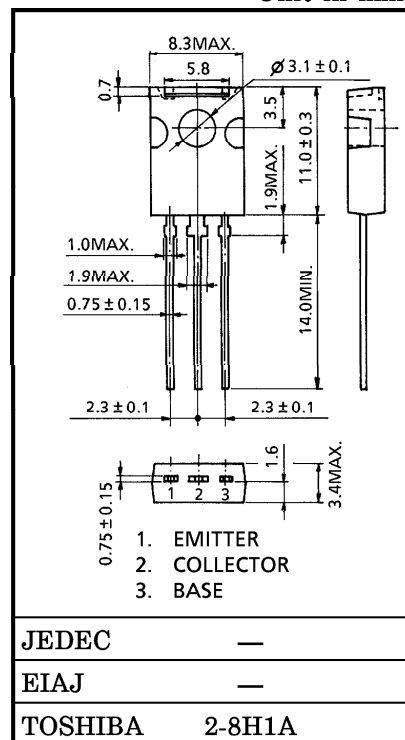
HIGH SPEED SWITCHING APPLICATION FOR INVERTER LIGHTING SYSTEM

Unit in mm

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

MAXIMUM RATINGS (T_a = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CB0}	400	V
Collector-Emitter Voltage	V _{CEO}	400	V
Emitter-Base Voltage	V _{EBO}	7	V
Collector Current	DC	I _C	1
	Pulse	I _{CP}	2
Base Current	I _B	0.5	A
Collector Power Dissipation	T _a = 25°C	P _C	1.5
	T _c = 25°C		10
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C



Weight : 0.82g

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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		ICBO	V _{CB} = 320V, I _E = 0	—	—	100	μA
Emitter Cut-off Current		IEBO	VEB = 7V, IC = 0	—	—	100	μA
Collector-Base Breakdown Voltage		V _{(BR)CBO}	IC = 1mA, IB = 0	400	—	—	V
Collector-Emitter Breakdown Voltage		V _{(BR)CEO}	IC = 10mA, IB = 0	400	—	—	V
DC Current Gain		h _{FE} (1)	V _{CE} = 5V, IC = 1mA	13	—	—	
		h _{FE} (2)	V _{CE} = 5V, IC = 0.04A	20	—	65	
Collector-Emitter Saturation Voltage		V _{CE(sat)}	IC = 0.2A, IB = 25mA	—	—	1.0	V
Base-Emitter Saturation Voltage		V _{BE(sat)}	IC = 0.2A, IB = 25mA	—	—	1.3	V
Switching Time	Rise Time	t _r	<p> $20\mu s$ $V_{CC} = 200V$ I_{B1} I_{B2} I_C 833Ω INPUT OUTPUT </p>	—	—	0.5	μs
	Storage Time	t _{stg}		—	—	5.0	
	Fall Time	t _f		$I_{B1} = 0.03A$, $I_{B2} = -0.06A$ $DUTY\ CYCLE \leq 1\%$	—	—	

