

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC5460

DYNAMIC FOCUS APPLICATIONS

HIGH VOLTAGE SWITCHING APPLICATIONS

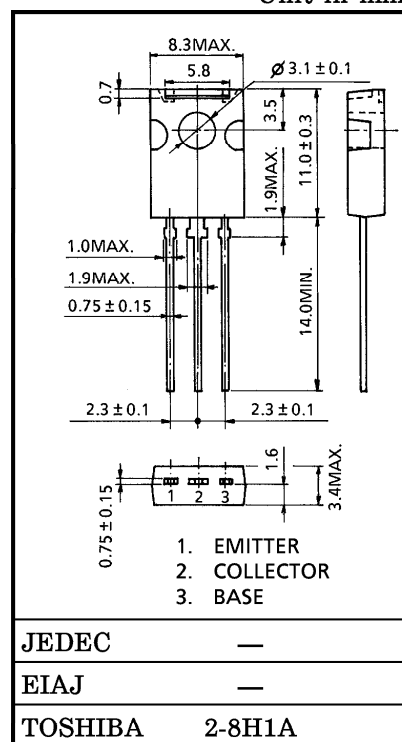
HIGH VOLTAGE AMPLIFIER APPLICATIONS

- High Voltage : $V_{CEO} = 800$ V

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	800	V
Collector-Emitter Voltage	V_{CEO}	800	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Base Current	I_B	25	mA
Collector Power Dissipation	P_C	$T_a = 25^\circ\text{C}$ 1.5	W
		$T_c = 25^\circ\text{C}$ 10	
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$

Unit in mm



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 640$ V, $I_E = 0$	—	—	1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5$ V, $I_C = 0$	—	—	10	μA
DC Current Gain	h_{FE}	$V_{CE} = 5$ V, $I_C = 7$ mA	15	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 20$ mA, $I_B = 4$ mA	—	—	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 20$ mA, $I_B = 4$ mA	—	—	1.5	V
Transition Frequency	f_T	$V_{CE} = 10$ V, $I_C = 3$ mA	—	5.5	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 100$ V, $f = 1$ MHz	—	2.2	—	pF

(Note) : When an external heat sink is used for the device, insulate using, for example, silicone rubber. When an external heat sink is not used, Toshiba recommends that the plastic part should be at least 2mm away from its surroundings.

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