

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SB908

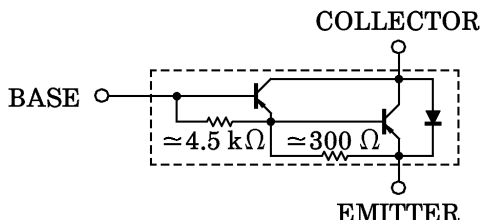
SWITCHING APPLICATIONS
 HAMMER DRIVE, PULSE MOTOR DRIVE APPLICATIONS
 POWER AMPLIFIER APPLICATIONS

- High DC Current Gain
 : $h_{FE(1)} = 2000$ (Min.) ($V_{CE} = -2\text{ V}$, $I_C = -1\text{ A}$)
- Low Saturation Voltage : $V_{CE(sat)} = -1.5\text{ V}$ (Max.) ($I_C = -3\text{ A}$)
- Complementary to 2SD1223.

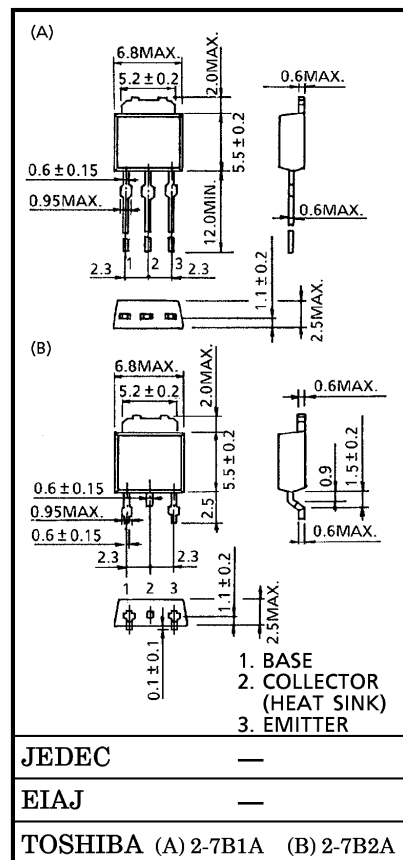
MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-100	V
Collector-Emitter Voltage	V_{CEO}	-80	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-4	A
Base Current	I_B	-0.4	A
Collector Power Dissipation	P_C	$T_a = 25^\circ\text{C}$	1.0
		$T_c = 25^\circ\text{C}$	15
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$

EQUIVALENT CIRCUIT



Unit in mm

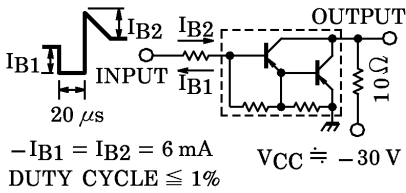


Weight : 0.36 g

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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		ICBO	V _{CB} = -100 V, I _E = 0	—	—	-20	μA
Emitter Cut-off Current		IEBO	V _{EB} = -5 V, I _C = 0	—	—	-2.5	mA
Collector-Emitter Breakdown Voltage		V _{(BR)CEO}	I _C = -10 mA, I _B = 0	-80	—	—	V
DC Current Gain		h _{FE} (1)	V _{CE} = -2 V, I _C = -1 A	2000	—	—	
		h _{FE} (2)	V _{CE} = -2 V, I _C = -3 A	1000	—	—	
Saturation Voltage	Collector-Emitter	V _{CE} (sat)	I _C = -3 A, I _B = -6 mA	—	—	-1.5	V
	Base-Emitter	V _{BE} (sat)	I _C = -3 A, I _B = -6 mA	—	—	-2.0	
Switching Time	Turn-on Time	t _{on}	 <p> $-I_{B1} = I_{B2} = 6 \text{ mA}$ $\text{DUTY CYCLE} \leq 1\%$ $V_{CC} \doteq -30 \text{ V}$ </p>	—	0.15	—	μs
	Storage Time	t _{stg}		—	0.80	—	
	Fall Time	t _f		—	—	0.40	

