

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

2SA1937

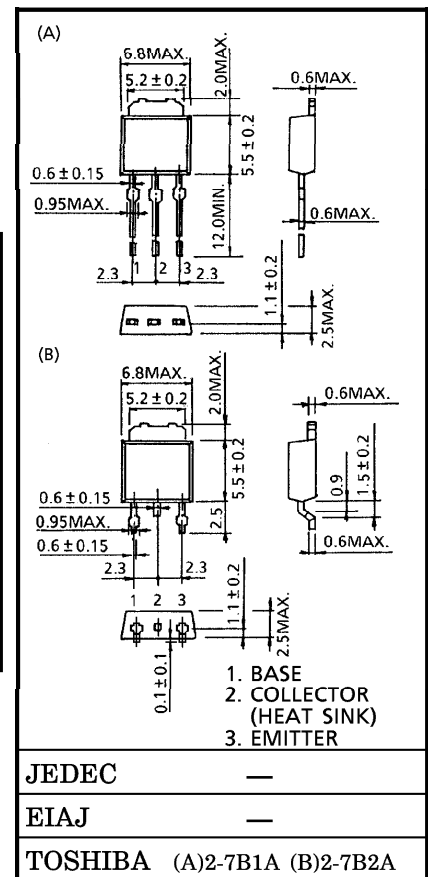
HIGH VOLTAGE SWITCHING APPLICATIONS

- High Voltage : $V_{CEO} = -600\text{ V}$

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-600	V
Collector-Emitter Voltage		V_{CEO}	-600	V
Emitter-Base Voltage		V_{EBO}	-7	V
Collector Current	DC	I_C	-0.5	A
	Pulse	I_{CP}	-1	
Base Current		I_B	-0.25	A
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	P_C	1	W
	$T_c = 25^\circ\text{C}$		10	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55~150	$^\circ\text{C}$

単位 : 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} = -600 V, I _E = 0	—	—	-10	μA
Emitter Cut-off Current		IEBO	V _{EB} = -7 V, I _C = 0	—	—	-1	μA
Collector-Emitter Breakdown Voltage		V _{(BR)CEO}	I _C = -10 mA, I _B = 0	-600	—	—	V
DC Current Gain		h _{FE} (1)	V _{CE} = -5 V, I _C = -20 mA	100	—	500	
		h _{FE} (2)	V _{CE} = -5 V, I _C = -100 mA	80	—	450	
Collector-Emitter Saturation Voltage		V _{CE(sat)}	I _C = -100 mA, I _B = -10 mA	—	—	-1.0	V
Base-Emitter Saturation Voltage		V _{BE(sat)}	I _C = -100 mA, I _B = -10 mA	—	-0.76	-0.9	V
Transition Frequency		f _T	V _{CE} = -5 V, I _C = -50 mA	—	35	—	MHz
Collector Output Capacitance		C _{ob}	V _{CB} = -10 V, I _E = 0, f = 1 MHz	—	24	—	pF
Switching Time	Turn-on Time	t _{on}		—	0.2	—	μs
	Storage Time	t _{stg}		—	2.3	—	μs
	Fall Time	t _f		I _{B1} = -10 mA, I _{B2} = 20 mA DUTY CYCLE ≤ 1%	—	0.2	—

