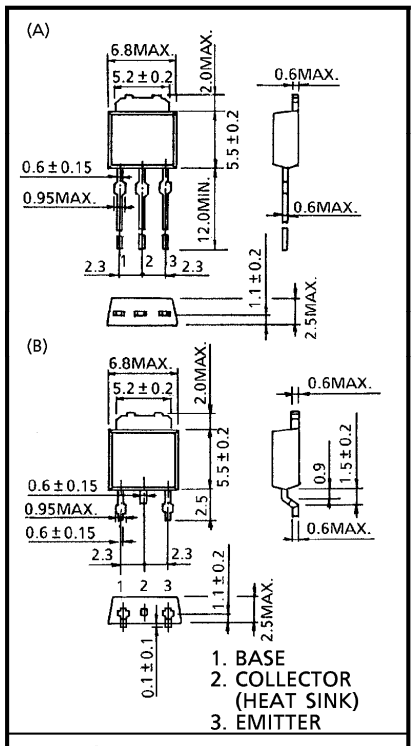
TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

2SA1802

STROBE FLASH APPLICATIONS
MEDIUM POWER AMPLIFIER APPLICATIONS

- Excellent h_{FE} Linearity
  : $h_{FE\,(1)}$ = 200~600 (V_{CE} = −2 V, I_C = −0.5 A)
  : $h_{FE\,(2)}$ = 140 (Min.) (V_{CE} = −2 V, I_C = −3 A)
- Low Collector Saturation Voltage
  : $V_{CE\,(sat)}$ = −0.5 V (Max.) (I_C = −3 A, I_B = −60 mA)
- Surface Mount Package : Lead Bending Type 2-7B2A
- Complementary to 2SC4681

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	(A)2-7B1A (B)2-7B2A

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	−30	V
Collector-Emitter Voltage		V_{CES}	−30	V
		V_{CEO}	−10	
Emitter-Base Voltage		V_{EBO}	−6	V
Collector Current	DC	I_C	−3	A
	Pulsed (Note 1)	I_{CP}	−6	
Base Current		I_B	−0.5	A
Collector Power Dissipation	Ta = 25°C	P_C	1.0	W
	Tc = 25°C		10	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	−55~150	°C

(Note 1) : Pulse Test : Pulse Width = 10 ms (Max.)
Duty Cycle = 30% (Max.)

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = −30 V, I_E = 0	—	—	−100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB} = −6 V, I_C = 0	—	—	−100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)\,CEO}$	I_C = −10 mA, I_B = 0	−10	—	—	V
DC Current Gain	$h_{FE\,(1)}$	V_{CE} = −2 V, I_C = −0.5 A	200	—	600	
	$h_{FE\,(2)}$	V_{CE} = −2 V, I_C = −3 A	140	200	—	
Collector-Emitter Saturation Voltage	$V_{CE\,(sat)}$	I_C = −3 A, I_B = −60 mA	—	−0.25	−0.50	V
Base-Emitter Voltage	V_{BE}	V_{CE} = −2 V, I_C = −3 A	—	−0.86	−1.2	V
Transition Frequency	f_T	V_{CE} = −2 V, I_C = −0.5 A	—	180	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = −10 V, I_E = 0, f = 1 MHz	—	50	—	pF

961001EAA2