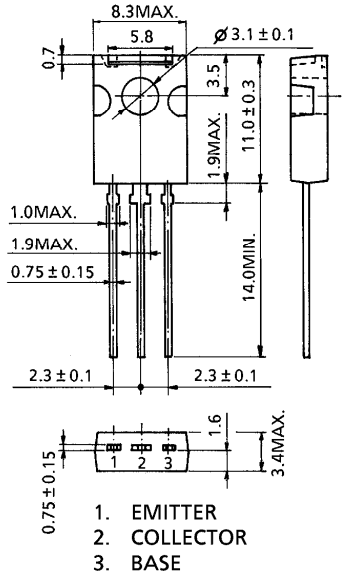
TENTATIVE TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

2SA1801

VIDEO OUTPUT STAGE IN HIGH RESOLUTION DISPLAY

Unit in mm

- High Transition Frequency : f_T = 600 MHz (Typ.) (V_{CE} = 10 V, I_C = 50 mA)
- Low Collector Output Capacitance : C_{ob} = 5.0 pF (Typ.) (V_{CB} = −30 V)



JEDEC	—
EIAJ	—
TOSHIBA	2-8H1A

Weight : 0.82 g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	−120	V
Collector-Emitter Voltage		V_{CEO}	−120	V
Emitter-Base Voltage		V_{EBO}	−5	V
Collector Current	DC	I_C	−300	mA
	Pulse	I_{CP}	−500	
Base Current		I_B	−100	mA
Collector Power Dissipation	Ta = 25°C	P_C	1.5	W
	Tc = 25°C		8	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	−55~150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = −120 V, I_E = 0	—	—	−1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = −5 V, I_C = 0	—	—	−10	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = −1 mA, I_B = 0	−120	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = −10 mA, I_B = 0	−120	—	—	V
DC Current Gain	$h_{FE(1)}$	V_{CE} = −10 V, I_C = −50 mA	40	—	240	
	$h_{FE(2)}$	V_{CE} = −10 V, I_C = −200 mA	25	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = −50 mA, I_B = −5mA	—	—	−1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = −50 mA, I_B = −5mA	—	—	−1.5	V
Transition Frequency	f_T	V_{CE} = −10 V, I_C = −50 mA	—	600	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = −30 V, f = 1 MHz, I_E = 0	—	4.0	5.0	pF

961001EAA1