

TENTATIVE

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

2 S A 1801

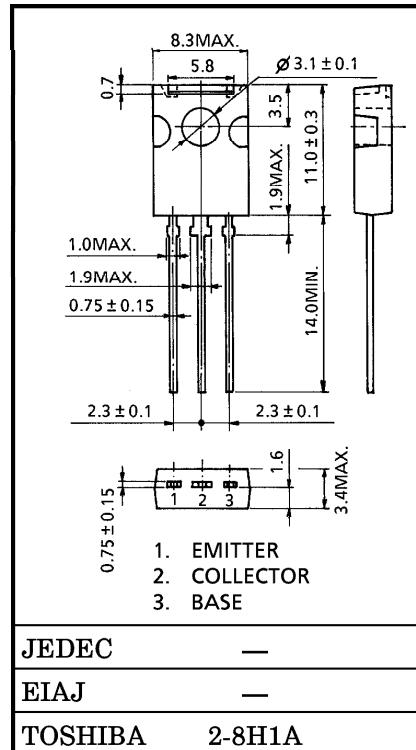
VIDEO OUTPUT STAGE IN HIGH RESOLUTION DISPLAY

- 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)

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	T _a = 25°C	P _C	1.5	W
	T _c = 25°C		8	
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55~150	°C

Unit in mm



Weight : 0.82 g

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

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