



2SD1710

Color TV Horizontal Deflection Output Applications

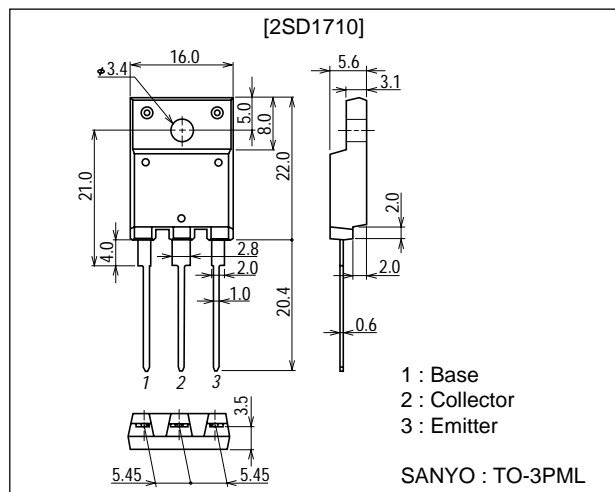
Features

- High speed($t_f=500\text{ns}$ max).
- High breakdown voltage($V_{CB0}=1500\text{V}$).
- High reliability(Adoption of HVP process).
- Adoption of MBIT process.

Package Dimensions

unit : mm

2039D



Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

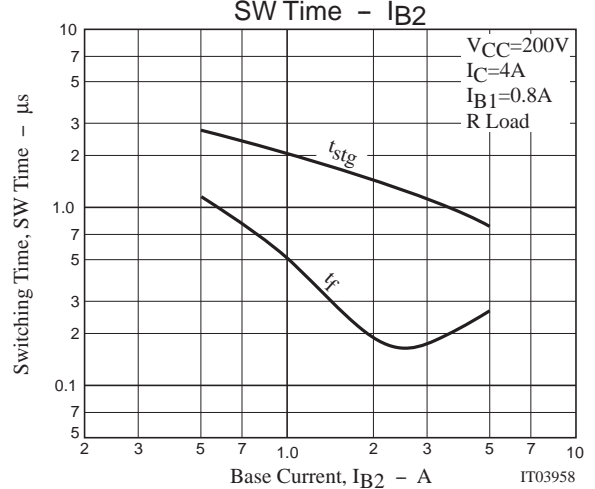
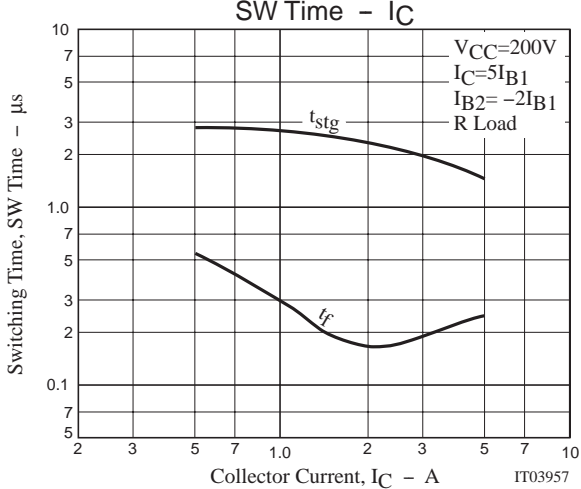
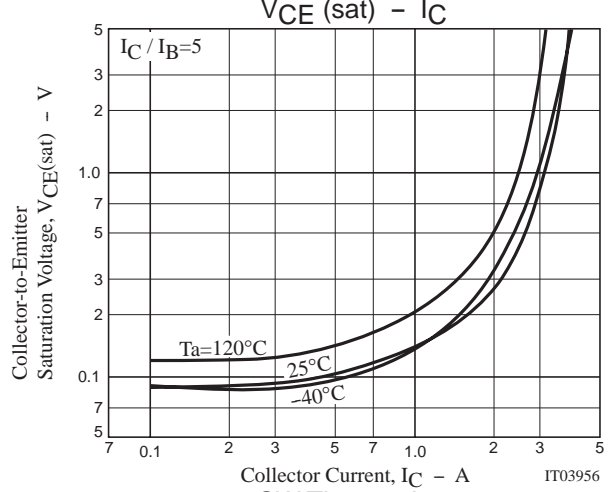
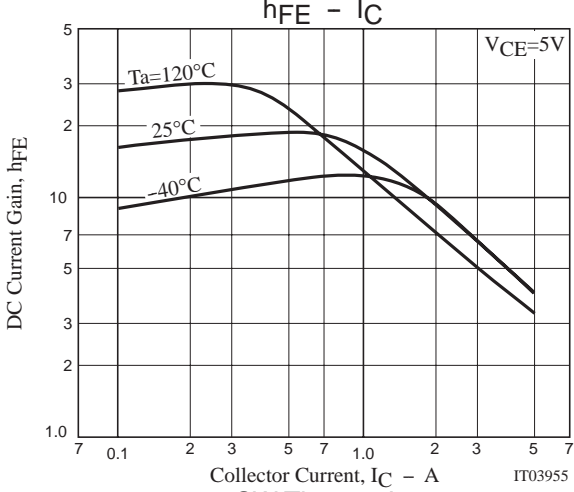
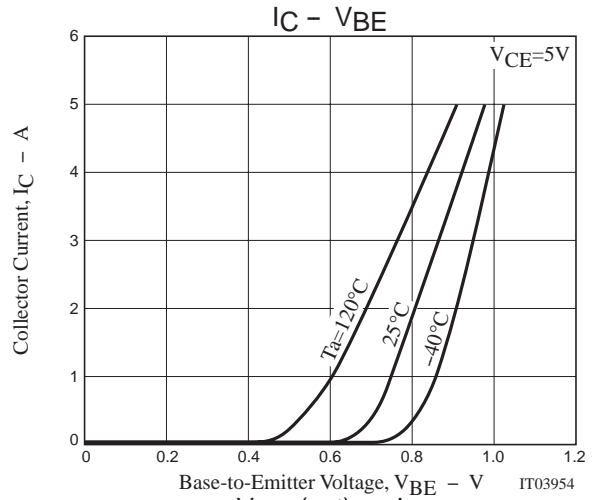
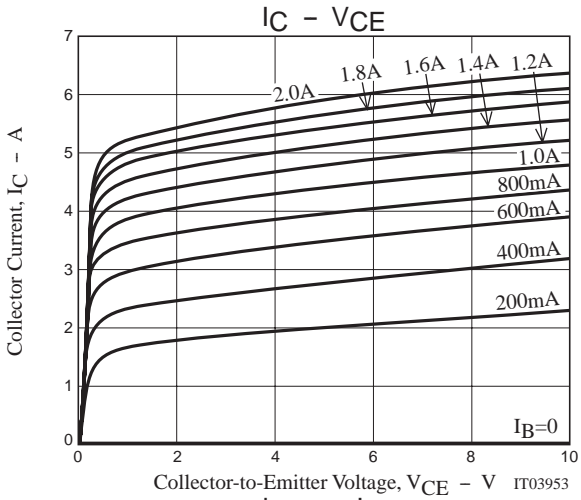
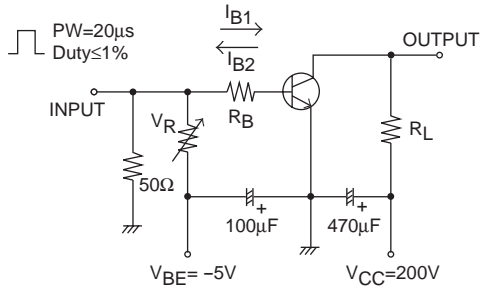
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		1500	V
Collector-to-Emitter Voltage	V_{CEO}		800	V
Emitter-to-Base Voltage	V_{EB0}		6	V
Collector Current	I_C		5	A
Collector Current (Pulse)	I_{CP}		16	A
Collector Dissipation	P_C		3	W
		$T_c=25^\circ\text{C}$	50	W
Junction Temperature	T_J		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

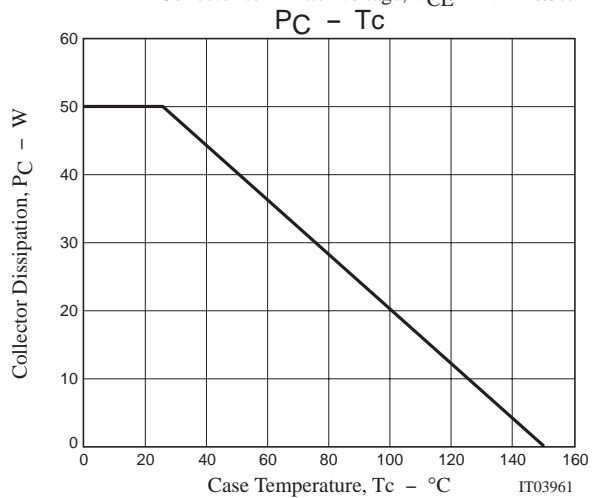
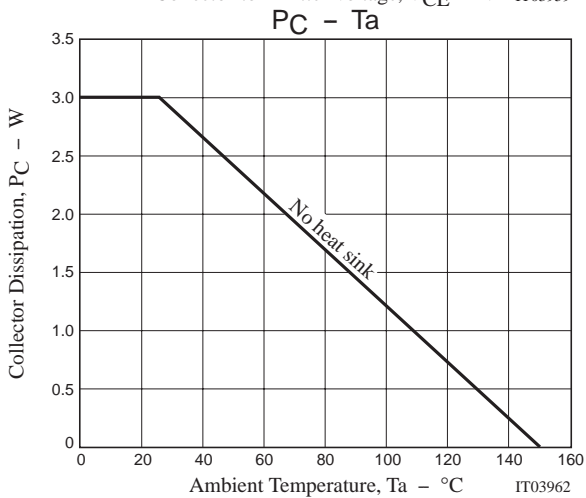
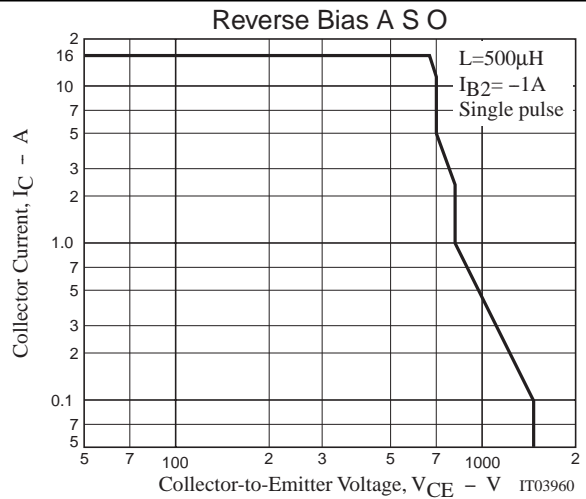
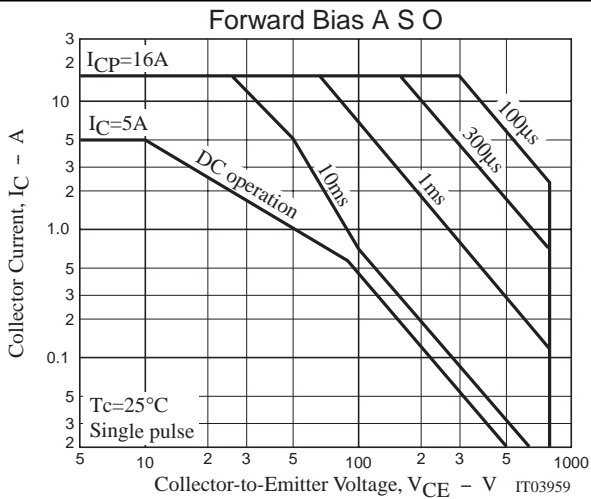
Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=800\text{V}$			10	μA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C=100\text{mA}$, $I_B=0$	800			V
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5\text{V}$			1	mA
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}$, $I_C=0.5\text{A}$	8			
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4.5\text{A}$, $I_B=2\text{A}$			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4.5\text{A}$, $I_B=2\text{A}$			1.5	V
Fall Time	t_f	$I_C=3\text{A}$, $I_{B1}=0.8\text{A}$, $I_{B2}=-1.6\text{A}$			0.5	μs

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Switching Time Test Circuit





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