

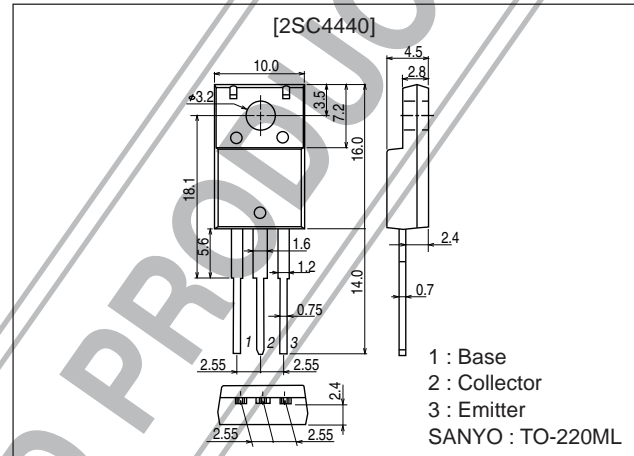
SANYO**2SC4440****Ultrahigh-Definition Monocuro Display
Horizontal Deflection Output Applications****Features**

- High reliability (Adoption of HVP process).
- High-speed switching.
- High breakdown voltage.
- Wide ASO.
- Adoption of MBIT process.
- Attachment workability is good by Mica-less package.

Package Dimensions

unit:mm

2041A

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		600	V
Collector-to-Emitter Voltage	V_{CEO}		400	V
Emitter-to-Base Voltage	V_{EBO}		7	V
Collector Current	I_C		7	A
Collector Current (Pulse)	I_{CP}	$PW \leq 300\mu\text{s}$, Duty Cycle $\leq 10\%$	14	A
Collector Dissipation	P_C	$T_c = 25^\circ\text{C}$	2.0	W
			30	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}	$V_{CB} = 400\text{V}$, $I_E = 0$			10	μA
	I_{CES}	$V_{CE} = 600\text{V}$			0.5	mA
Collector-to-Emitter Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}$, $I_B = 0$	400			V
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}$, $I_C = 0$			1	mA
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 4\text{A}$, $I_B = 0.8\text{A}$			0.8	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 4\text{A}$, $I_B = 0.8\text{A}$			1.5	V

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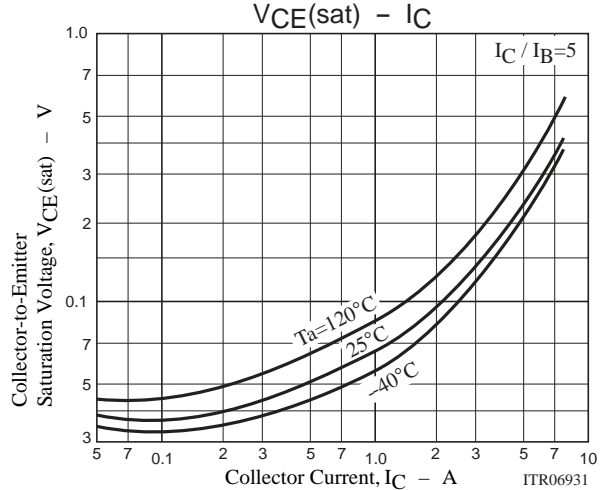
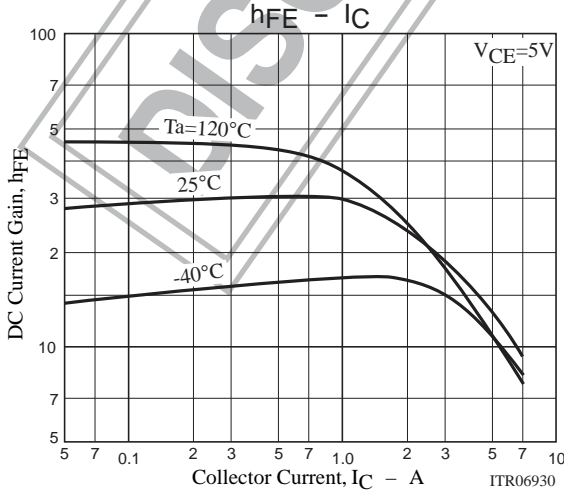
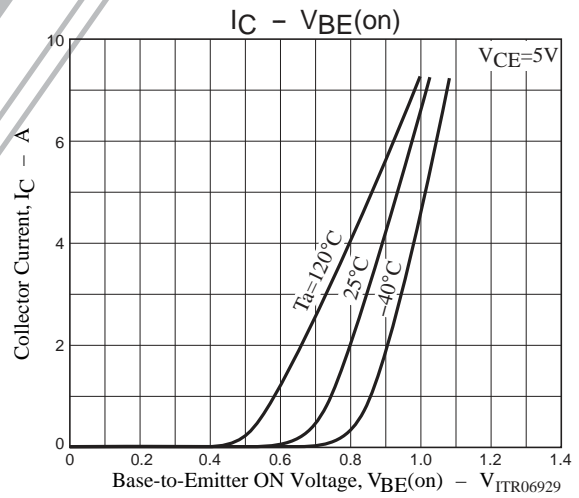
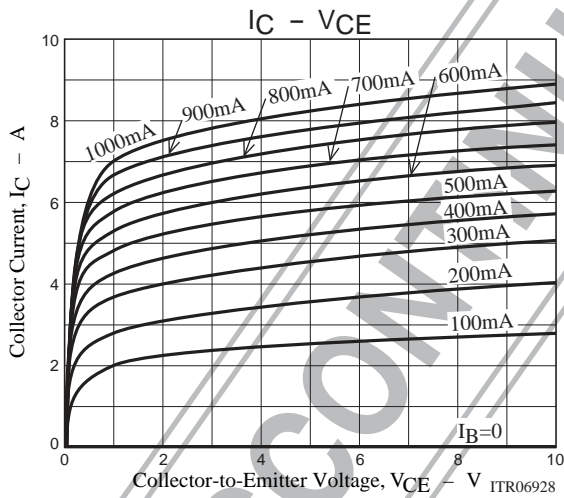
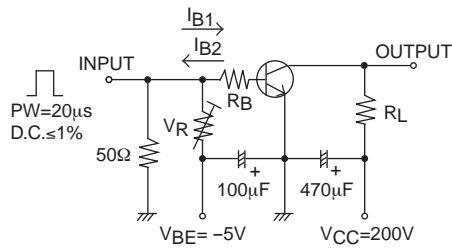
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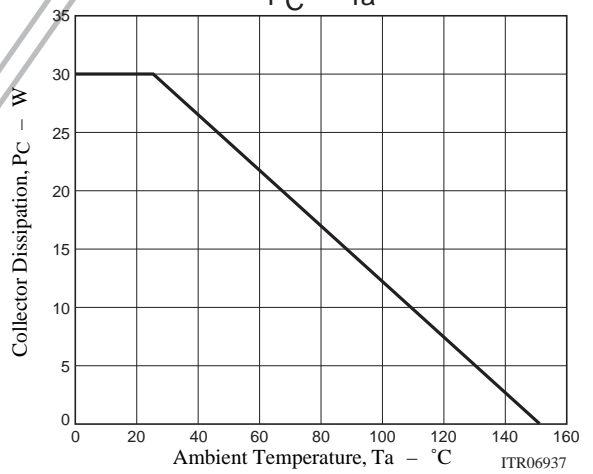
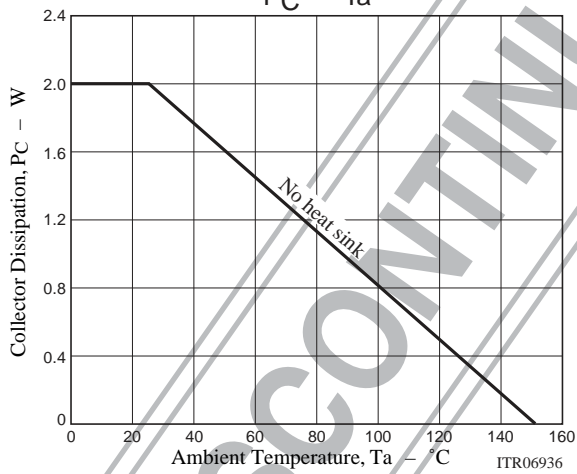
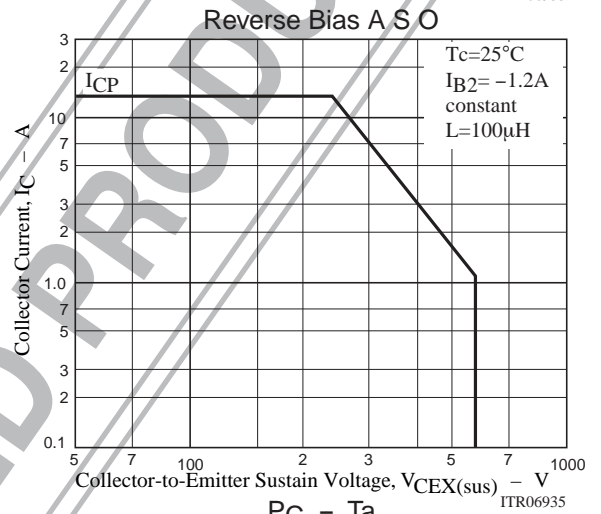
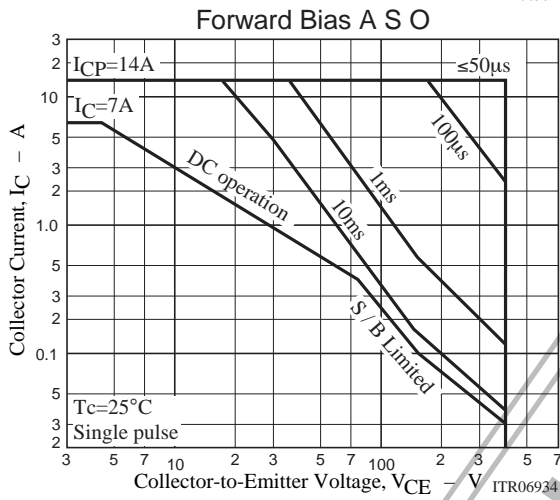
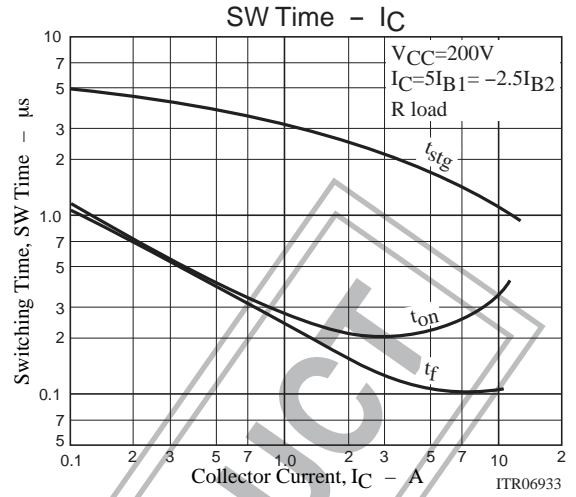
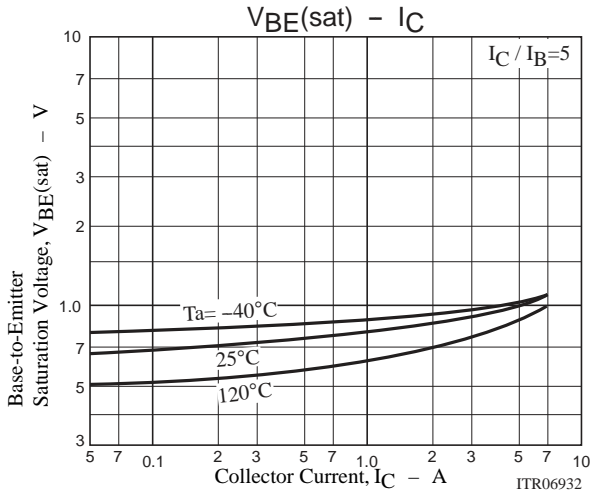
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
DC Current Gain	h_{FE1}	$V_{CE}=5V, I_C=0.8A$	15			
	h_{FE2}	$V_{CE}=5V, I_C=4A$	10		20	
Gain-Bandwidth Product	f_T	$V_{CE}=10V, I_C=0.8A$		20		MHz
Storage Time	t_{stg}	$I_C=5A, I_{B1}=1A, I_{B2}=-2A, R_L=40\Omega, V_{CC}=200V$			3.0	μs
Fall Time	t_f	$I_C=5A, I_{B1}=1A, I_{B2}=-2A, R_L=40\Omega, V_{CC}=200V$			0.2	μs

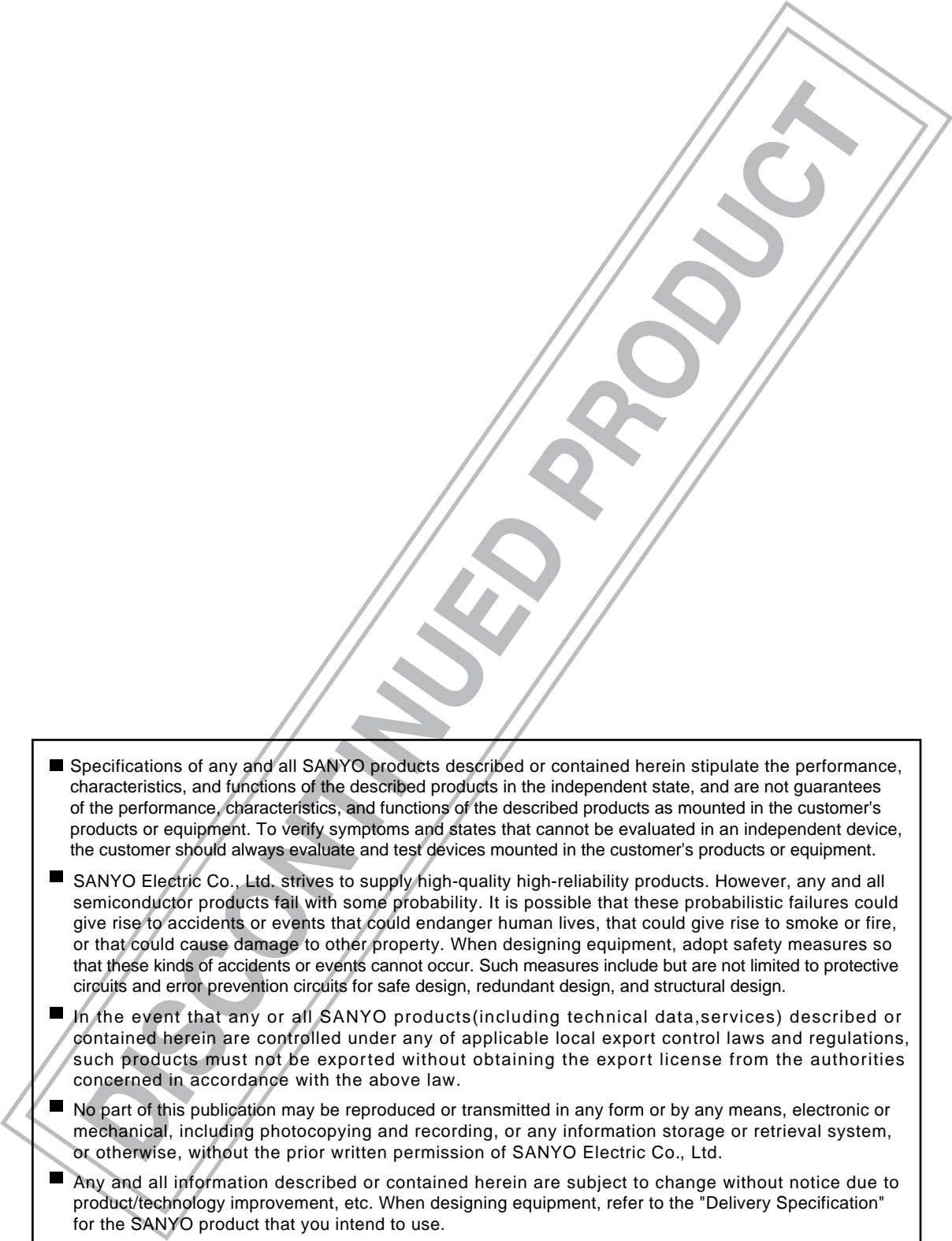
Switching Time Test Circuit



2SC4440



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