

SANYO	No.4780	2SC5042
		NPN Triple Diffused Planar Silicon Transistor Very High-Definition CRT Display Horizontal Deflection Output Applications

Features

- High speed ($t_f=100\text{ns typ.}$).
- High reliability (HVP process).
- High breakdown voltage ($V_{CBO}=1600\text{V}$).
- Adoption of MBIT process.

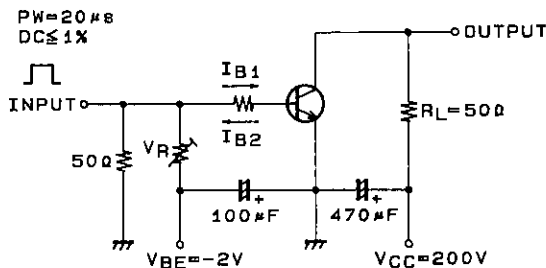
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

			unit
Collector-to-Base Voltage	V_{CBO}	1600	V
Collector-to-Emitter Voltage	V_{CEO}	800	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	7	A
Collector Current (Pulse)	I_{CP}	16	A
Collector Dissipation	P_C	3.0	W
		$T_c=25^\circ\text{C}$	60
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

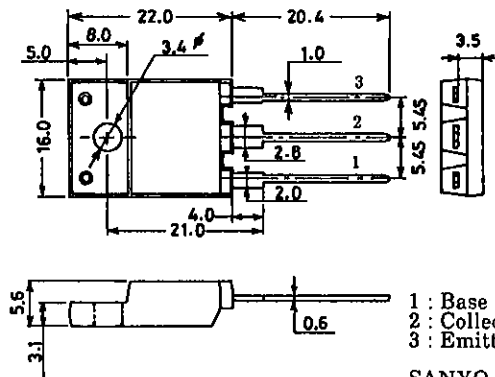
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=800\text{V}, I_E=0$			10	μA
Collector Cutoff Current	I_{CES}	$V_{CE}=1600\text{V}, R_{BE}=0$			1.0	mA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C=100\text{mA}, I_B=0$	800			V
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			1.0	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=5\text{A}, I_B=1.25\text{A}$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=5\text{A}, I_B=1.25\text{A}$			1.5	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5\text{V}, I_C=1\text{A}$	15		25	
	$h_{FE(2)}$	$V_{CE}=5\text{V}, I_C=5\text{A}$	4		7	
Storage Time	t_{stg}	$I_C=4\text{A}, I_{B1}=0.7\text{A}, I_{B2}=-2.0\text{A}$			2.0	μs
Fall Time	t_f	$I_C=4\text{A}, I_{B1}=0.7\text{A}, I_{B2}=-2.0\text{A}$		0.1	0.2	μs

Switching Time Test Circuit



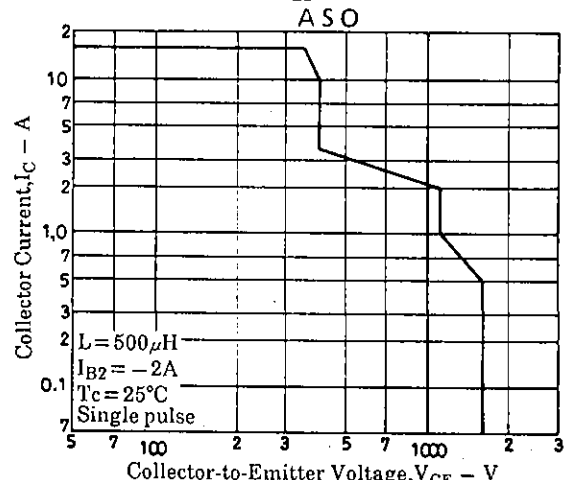
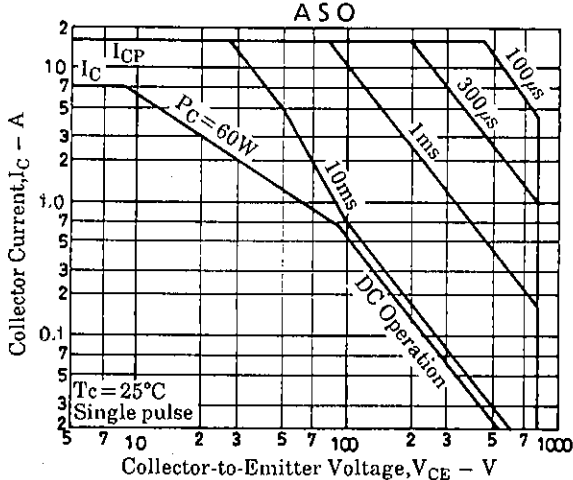
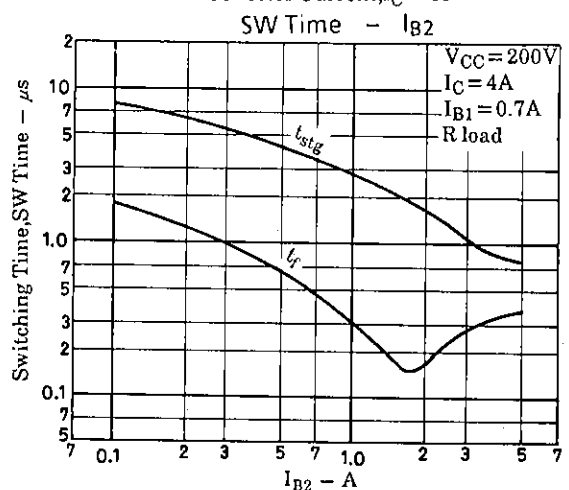
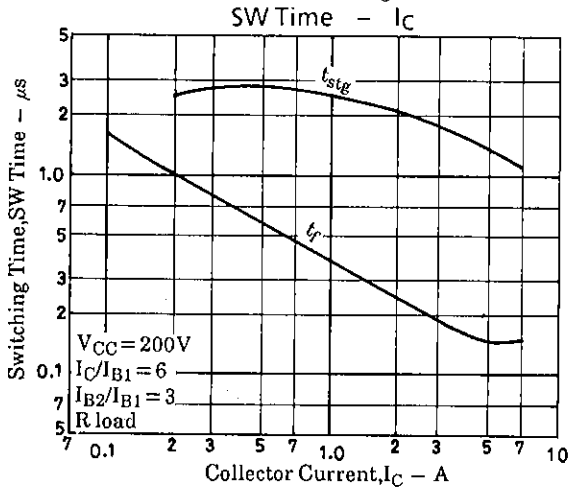
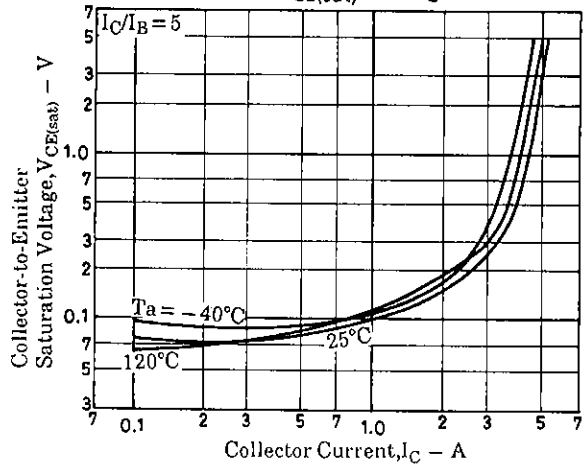
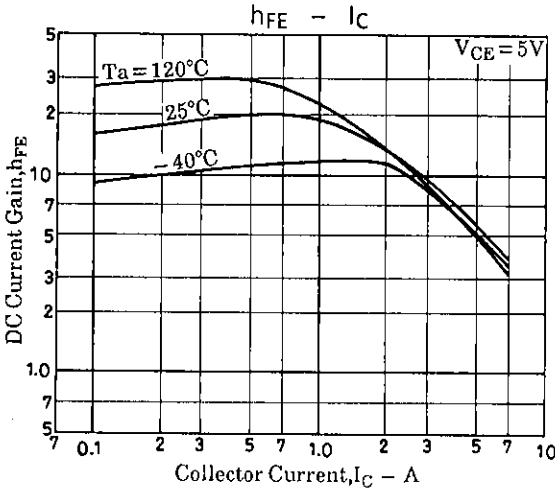
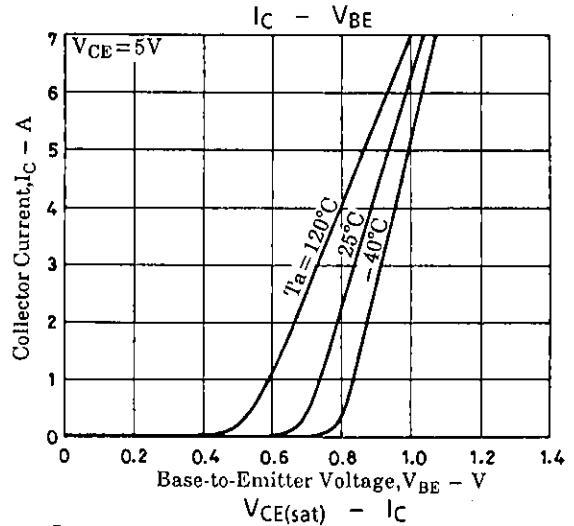
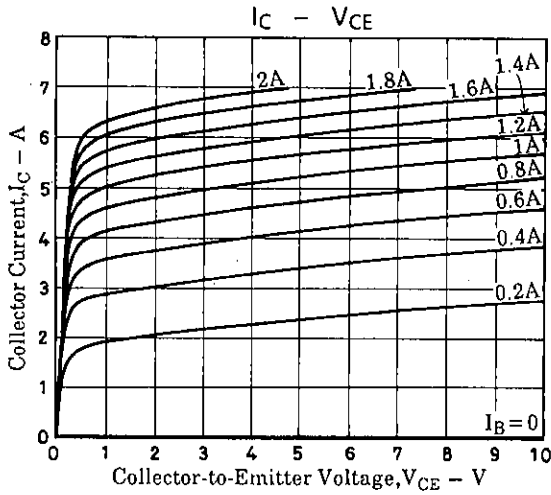
Package Dimensions 2039C

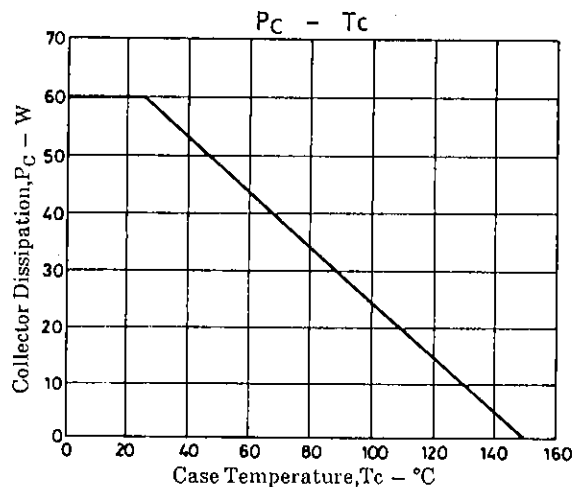
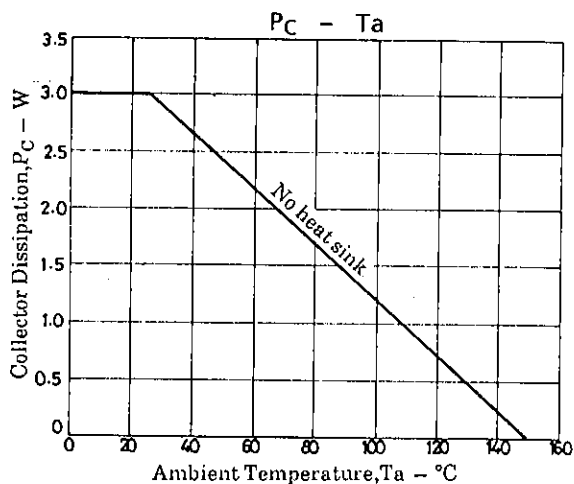
(unit : mm)



1 : Base
2 : Collector
3 : Emitter

SANYO : TO-3PML





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