

SANYO	No. 1940B	2SC3688
NPN Triple Diffused Planar Silicon Transistor VERY HIGH-DEFINITION CRT DISPLAY HORIZONTAL DEFLECTION OUTPUT		

Applications

- . Very high-definition color display horizontal deflection output

Features

- . Fast speed (t_f typ=100ns).
- . High breakdown voltage (V_{CBO} =1500V).
- . High reliability (adoption of HVP process).
- . Adoption of MBIT process.

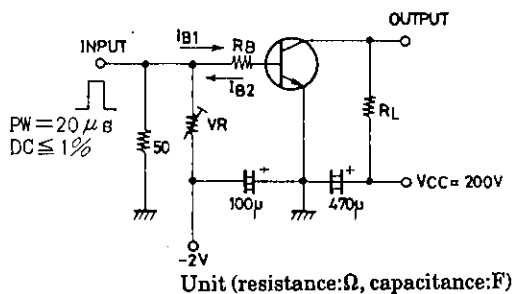
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Collector-to-Base Voltage	V_{CBO}	1500		unit
Collector-to-Emitter Voltage	V_{CEO}	800		V
Emitter-to-Base Voltage	V_{EBO}	6		V
Collector Current	I_C	10		A
Peak Collector Current	i_{cp}	25		A
Collector Dissipation	P_C	150	$T_c=25^\circ\text{C}$	W
Junction Temperature	T_j	150		$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150		$^\circ\text{C}$

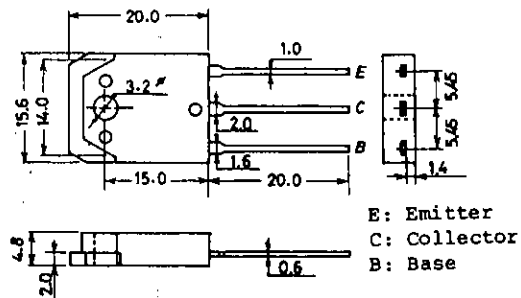
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CES}	$V_{CE}=1500\text{V}, R_{BE}=0$			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
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=8\text{A}, I_B=2.0\text{A}$			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=8\text{A}, I_B=2.0\text{A}$			1.5	V
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}, I_C=1.0\text{A}$	8			
Storage Time	t_{stg}	$I_C=6\text{A}, I_{B1}=1.2\text{A}, I_{B2}=-2.4\text{A}$			3.0	μs
Fall Time	t_f	$I_C=6\text{A}, I_{B1}=1.2\text{A}, I_{B2}=-2.4\text{A}$		0.1	0.2	μs

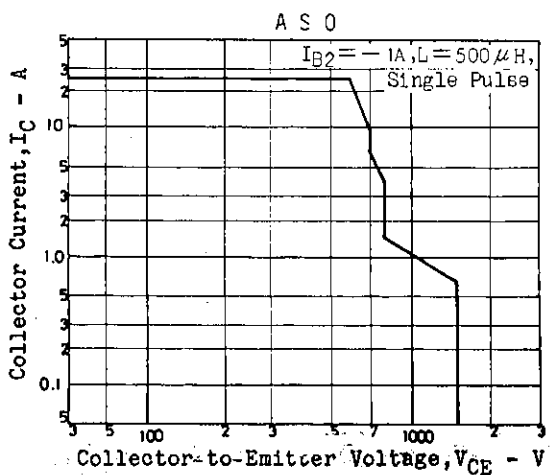
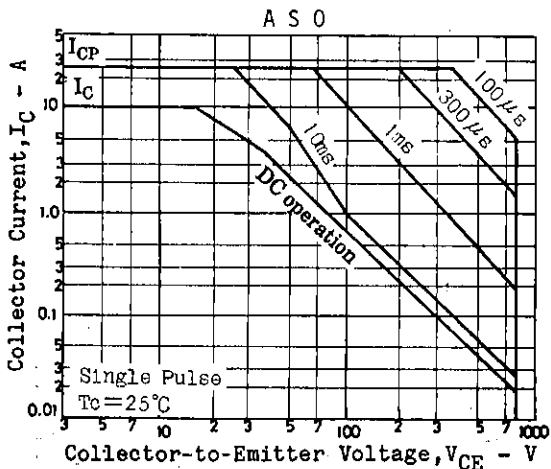
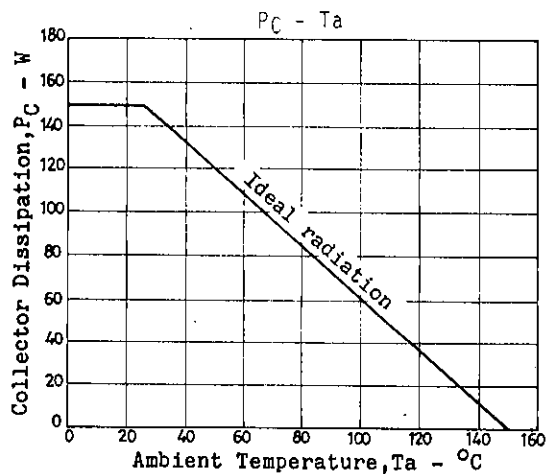
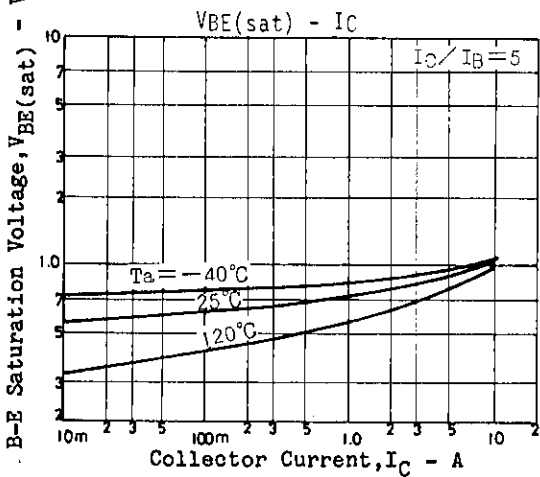
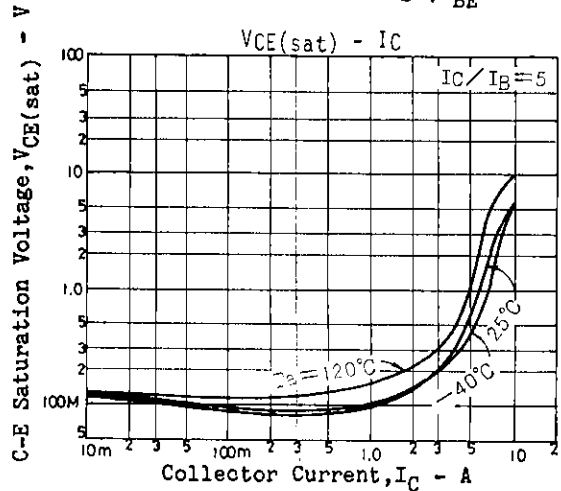
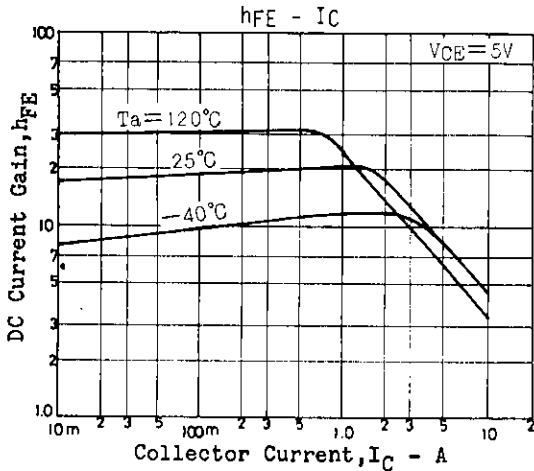
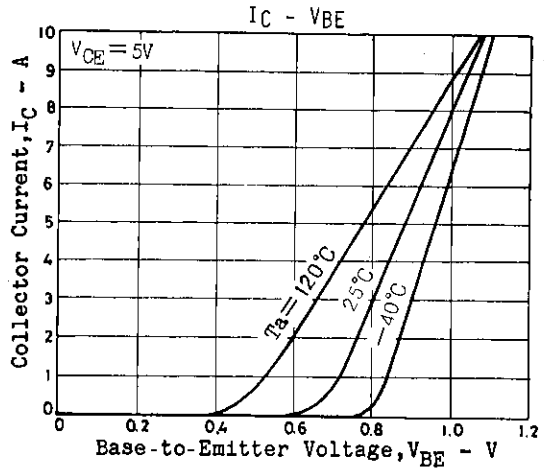
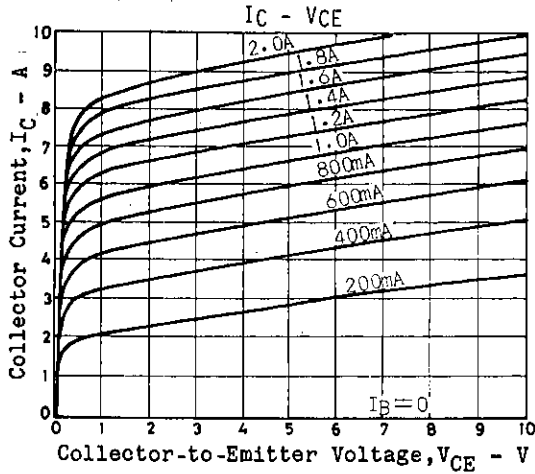
Switching Time Test Circuit



Package Dimensions 2022 (unit: mm)



SANYO: TO3PB



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