

SANYO

No.2431

2SD1884

NPN Triple Diffused Planar Type
Silicon Transistor

COLOR TV HORIZONTAL DEFLECTION OUTPUT APPLICATIONS

Applications

- . Color TV horizontal deflection output
- . Color display horizontal deflection output

Features

- . High speed ($t_f=100\text{ns}$)
- . high breakdown voltage ($V_{CBO}=1500\text{V}$)
- . High reliability (adoption of HVP process)

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

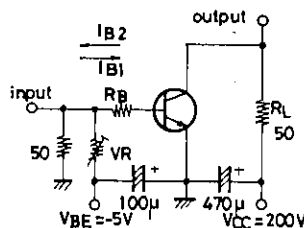
			unit
Collector-to-Base Voltage	V_{CBO}	1500	V
Collector-to-Emitter Voltage	V_{CEO}	800	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	5	A
Peak Collector Current	i_{cp}	20	A
Collector Dissipation	P_C	60	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

			min	typ	max	unit
Collector Cutoff Current	I_{CES}	$V_{CE}=1500\text{V}$			1.0	mA
	I_{CBO}	$V_{CB}=800\text{V}$			10	μA
Collector Sustain Voltage	$V_{CEO}(\text{sus})$	$I_C=100\text{mA}, I_B=0$	800			V
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4\text{V}$			1.0	mA
C-E Saturation Voltage	$V_{CE}(\text{sat})$	$I_C=4\text{A}, I_B=0.8\text{A}$			5	V
B-E Saturation Voltage	$V_{BE}(\text{sat})$	$I_C=4\text{A}, I_B=0.8\text{A}$			1.5	V
DC Current Gain	h_{FE1}	$V_{CE}=5\text{V}, I_C=1\text{A}$	8			
	h_{FE2}	$V_{CE}=5\text{V}, I_C=4\text{A}$	5		10	
Fall Time	t_f	$I_C=4\text{A}, I_{B1}=0.8\text{A},$		0.1	0.3	μs
		$I_{B2}=-1.6\text{A}$				

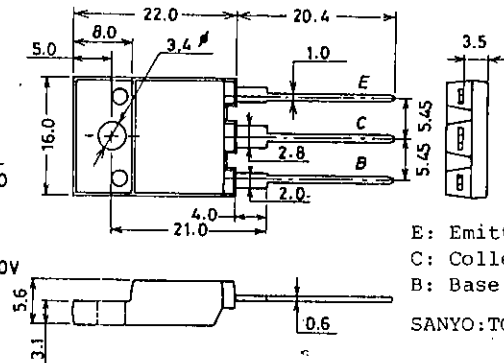
Switching Time Test Circuit

$PW=20\mu\text{s}, \text{duty} \leq 1\%$

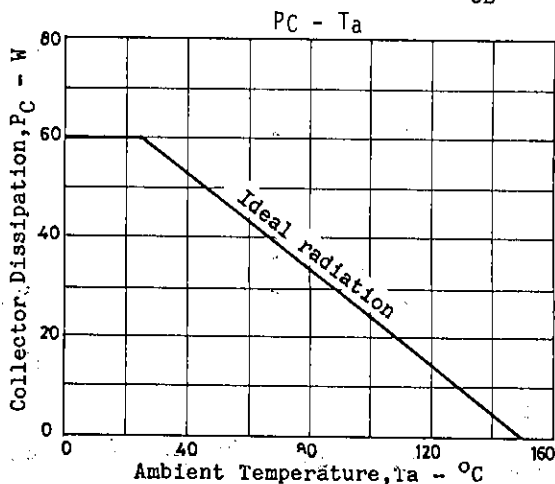
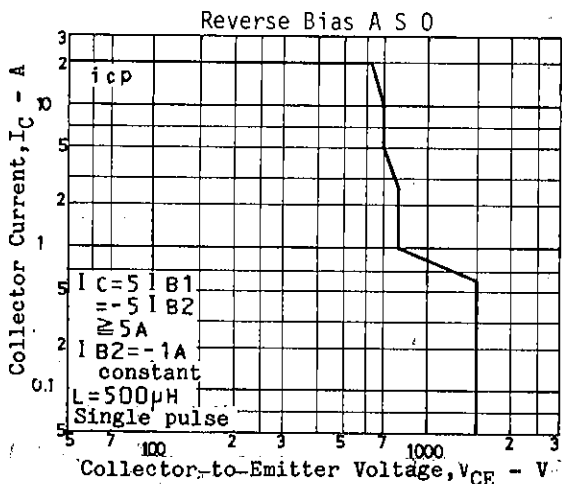
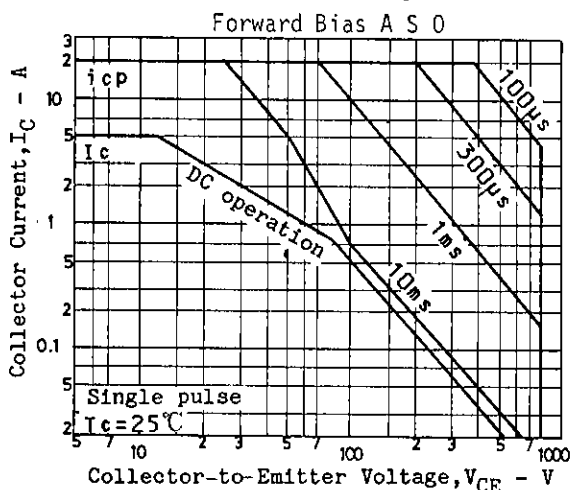
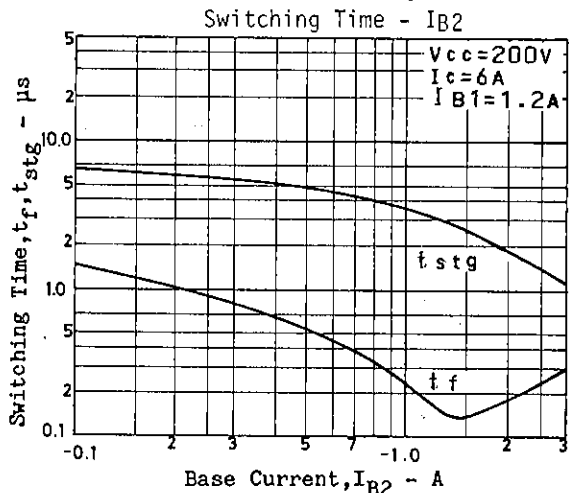
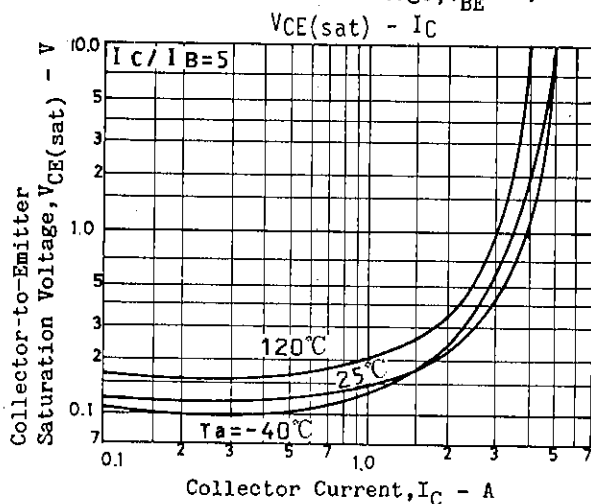
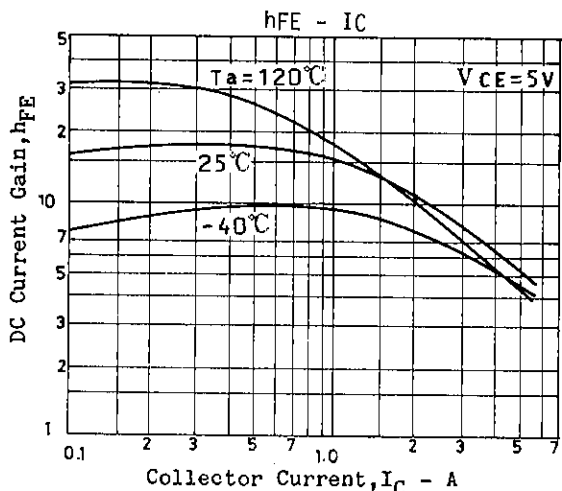
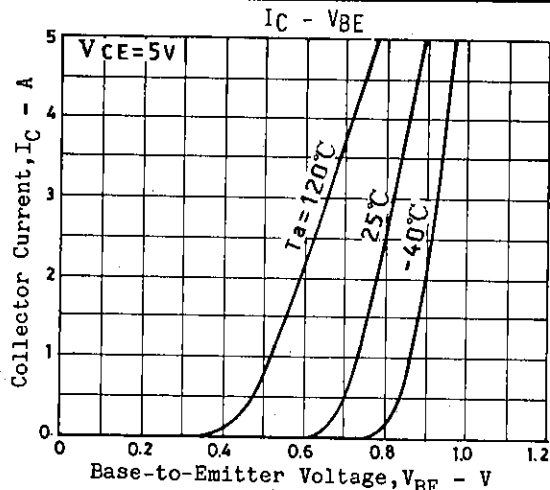
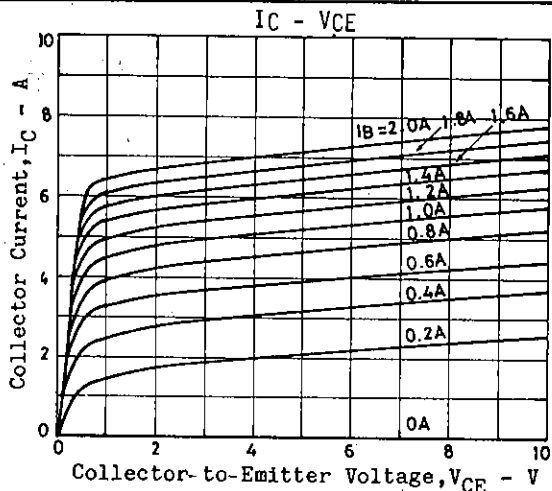


Unit (resistance: Ω , capacitance: F)

Package Dimensions 2039 (unit:mm)



E: Emitter
C: Collector
B: Base
SANYO:TO3PML



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