

SANYO

No.2424

2SD1877

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 ($t_f=100ns$)
- . high breakdown voltage ($V_{CBO}=1500V$)
- . High reliability (adoption of HVP process)
- . On-chip damper diode

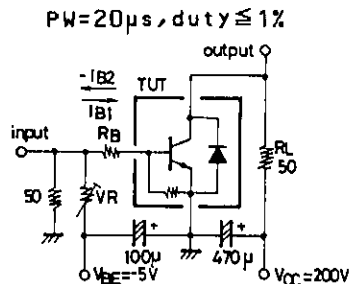
Absolute Maximum Ratings at $T_a=25^\circ C$

			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	4	A
Peak Collector Current	i_{cp}	12	A
Collector Dissipation	P_C	50	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

Electrical Characteristics at $T_a=25^\circ C$

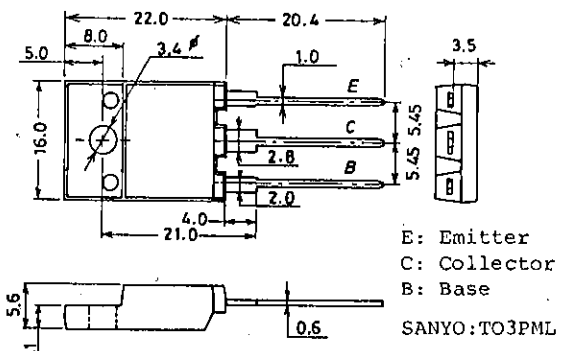
			min	typ	max	unit
Collector Cutoff Current	I_{CES}	$V_{CE}=1500V$			1.0	mA
	I_{CBO}	$V_{CB}=800V$			10	μA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C=100mA, I_B=0$	800			V
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4V$	40		130	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=2.5A, I_B=0.8A$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=2.5A, I_B=0.8A$			1.5	V
DC Current Gain	h_{FE1}	$V_{CE}=5V, I_C=0.5A$	8			
	h_{FE2}	$V_{CE}=5V, I_C=2.5A$	3.5		7	
Diode Forward Voltage	V_F	$I_{EC}=4A$			2.0	V
Fall Time	t_f	$I_C=3A, I_{B1}=0.8A, I_{B2}=-1.6A$		0.1	0.3	μs

Switching Time Test Circuit

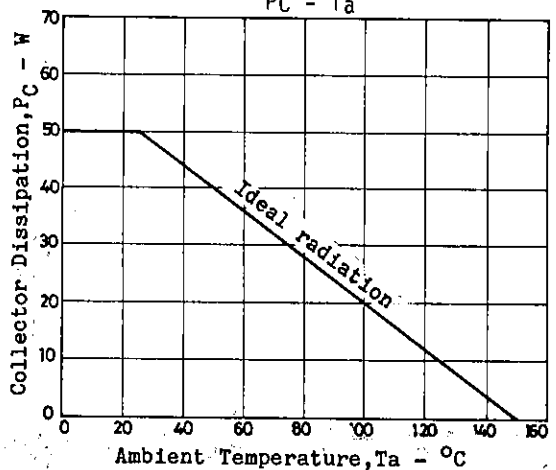
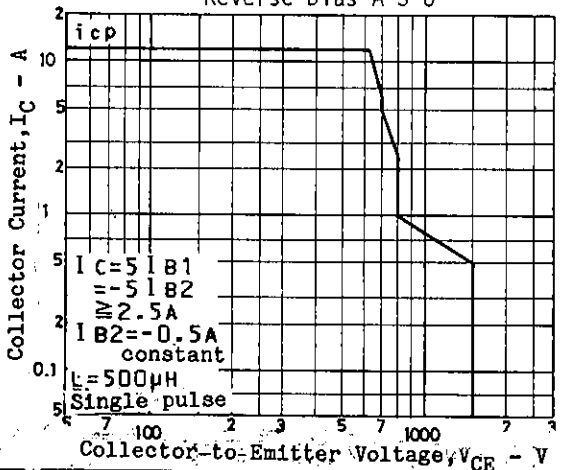
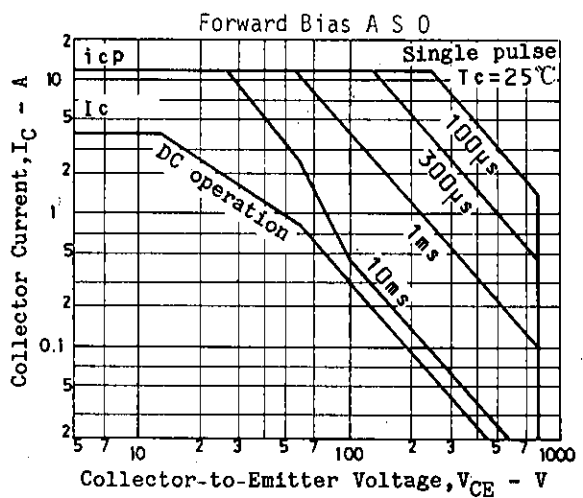
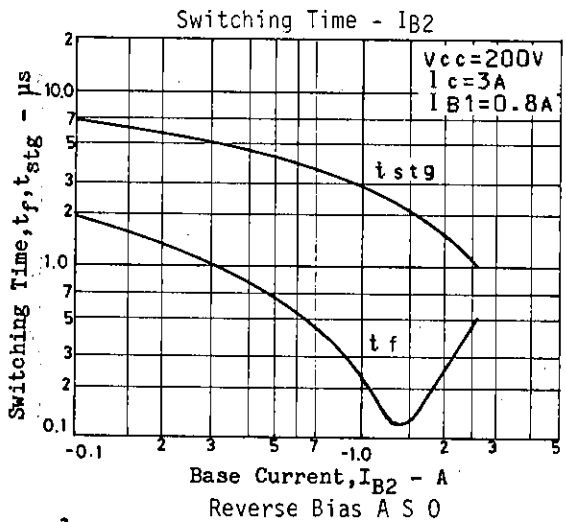
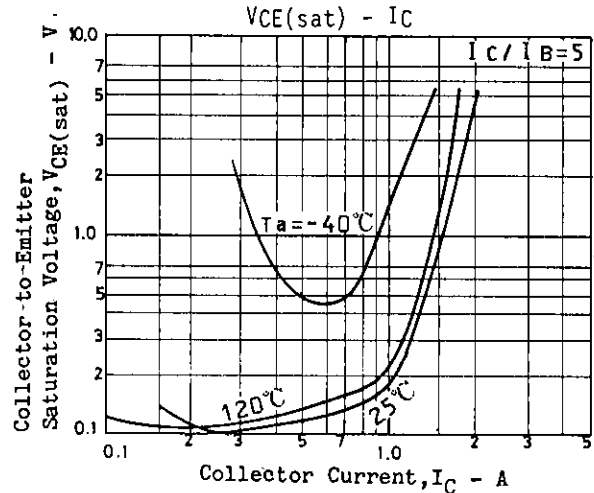
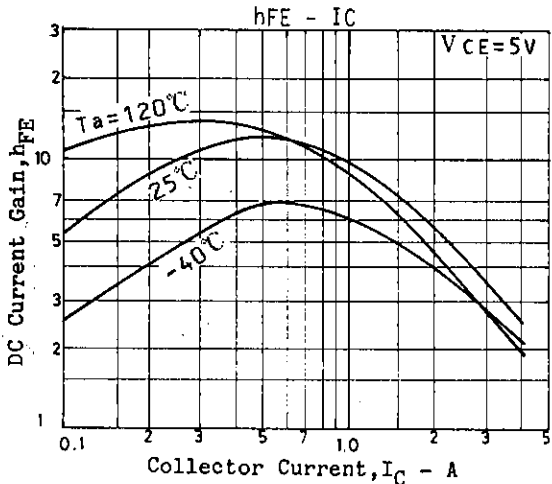
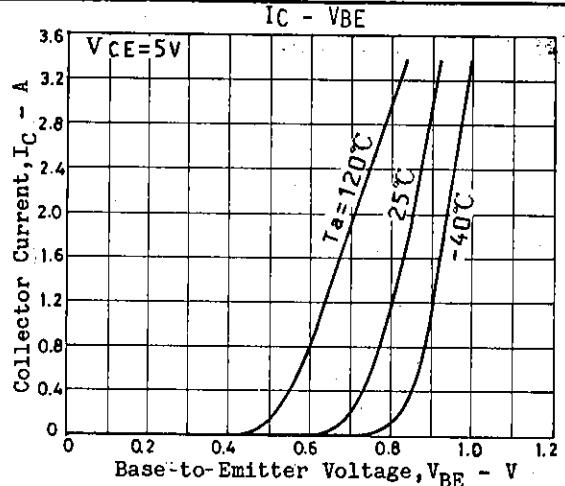
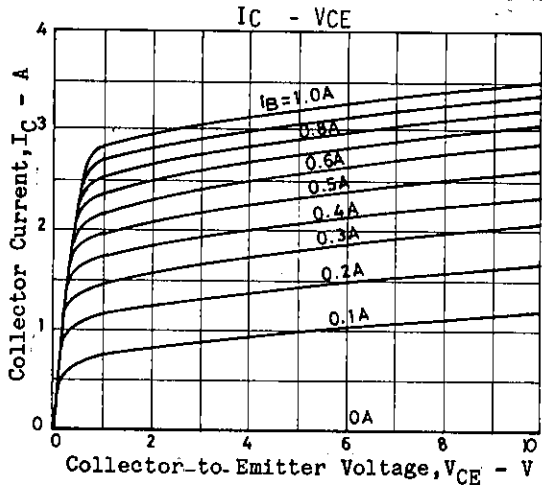


Unit (resistance: Ω , capacitance:F)

Package Dimensions 2039 (unit:mm)



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



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