Ordering number: EN 2423

SANYO

No.2423

2SD1876

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

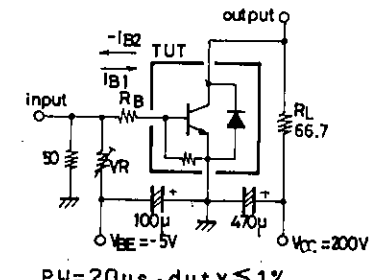
Absolute Maximum Ratings at Ta=25°C

			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	3	A
Peak Collector Current	i_{cp}	12	A
Collector Dissipation	P_C	50	W
Junction Temperature	Tj	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

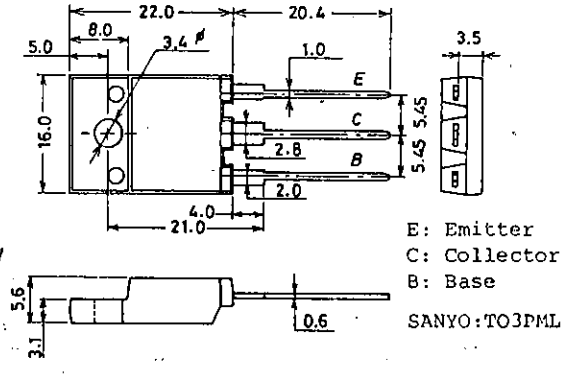
			min	typ	max	unit
Collector Cutoff Current	I_{CES}	V_{CE}=1500V			1.0	mA
	I_{CBO}	V_{CB}=800V			10	μA
Collector Sustain Voltage	$V_{CEO(sus)}$	I_C=100mA, I_B=0	800			V
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V	40		130	mA
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=2A, I_B=0.6A			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=2A, I_B=0.6A			1.5	V
DC Current Gain	h_{FE1}	V_{CE}=5V, I_C=0.5A	8			
	h_{FE2}	V_{CE}=5V, I_C=2A	3		6	
Diode Forward Voltage	V_F	I_{EC}=3A			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



PW=20μs, duty≦1%
Unit (resistance:Ω, capacitance:F)

Package Dimensions 2039 (unit:mm)



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

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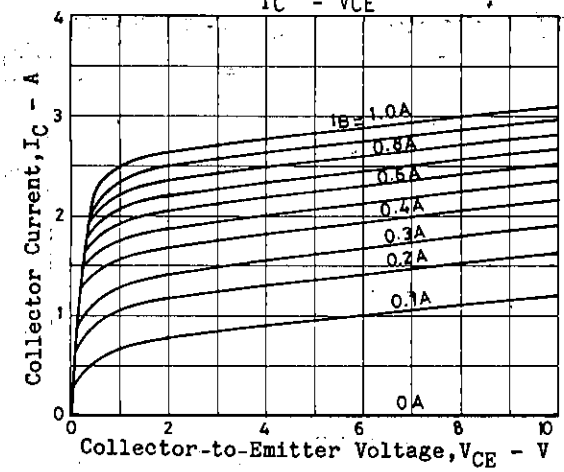
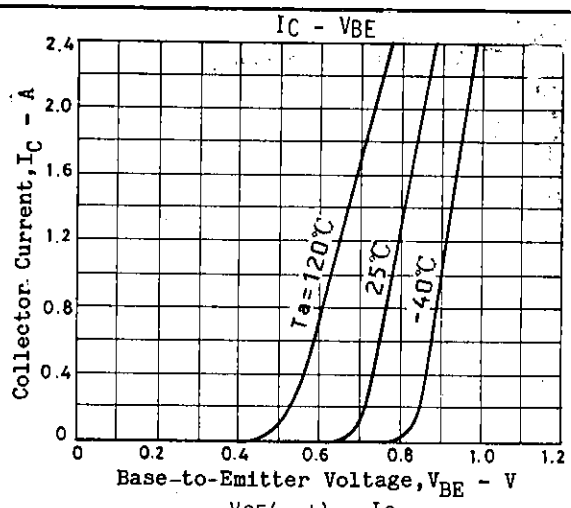
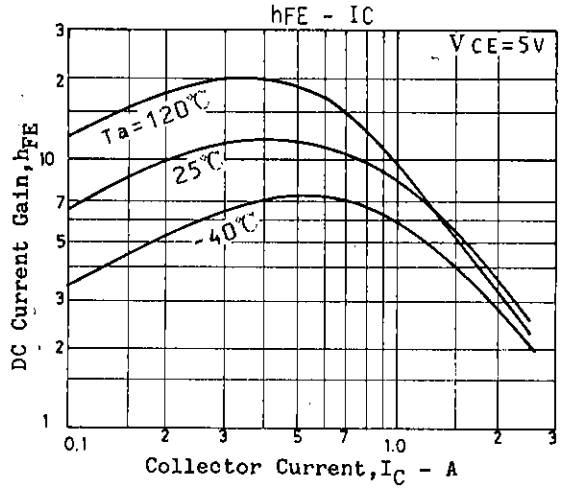
IC - VCE



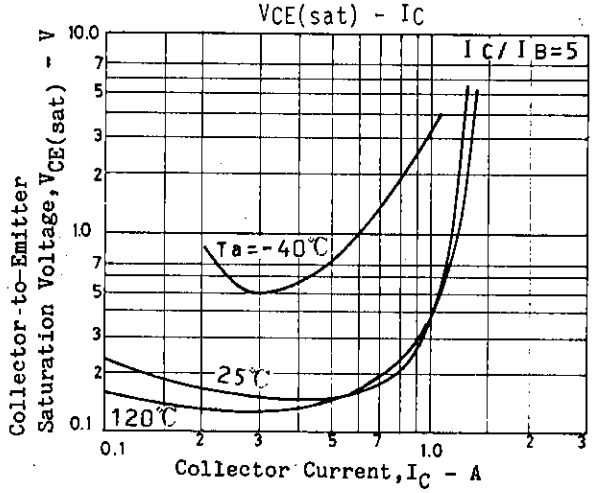
IC - VBE



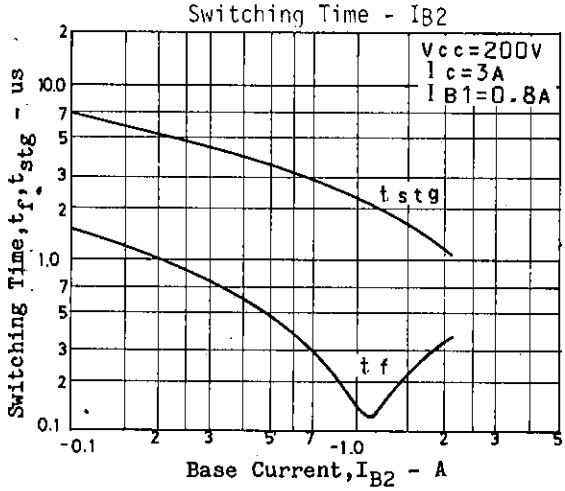
hFE - IC



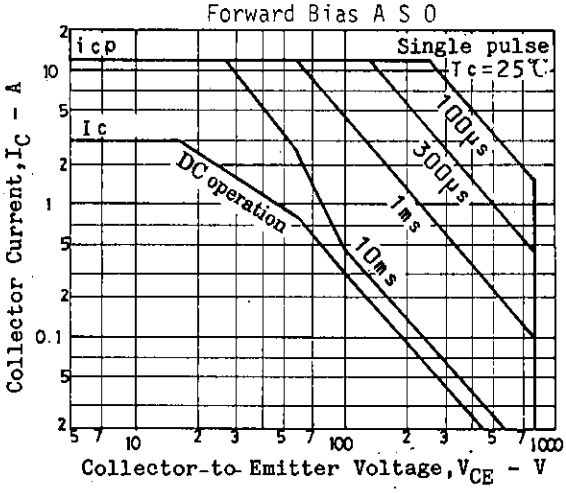
VCE(sat) - IC



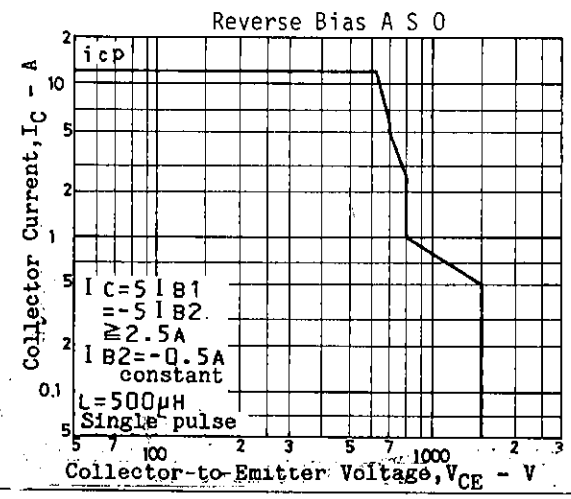
Switching Time - IB2



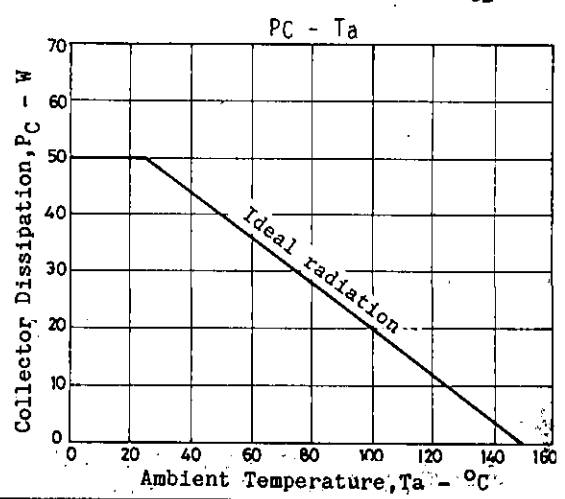
Forward Bias A S O



Reverse Bias A S O



PC - Ta



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