Ordering number: EN 2434

SANYO

No.2434

2SD1887

NPN Triple Diffused Planar 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)

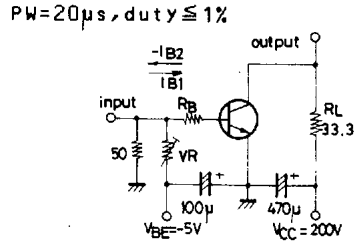
Absolute Maximum Ratings at Ta=25°C

			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	10	A
Collector Current (Pulse)	I_{CP}	30	A
Collector Dissipation	I_C	70	W
Junction Temperature	Tj	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

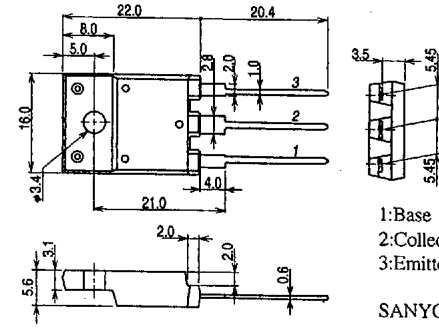
			min	typ	max	unit
Collector Cutoff Current	I_{CES}	V_{CE}=1500V			1.0	mA
	I_{CBO}	V_{CB}=800V			10	μA
Collector Sustain Voltage	$V_{CEO(sus)}$	I_C=100mA, I_B=0	800			V
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V			1.0	mA
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=8A, I_B=1.6A			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=8A, I_B=1.6A			1.5	V
DC Current Gain	h_{FE1}	V_{CE}=5V, I_C=1A	8			
	h_{FE2}	V_{CE}=5V, I_C=8A	5		10	
Fall Time	t_f	I_C=6A, I_{B1}=1.2A, I_{B2}=-2.4A		0.1	0.3	μs

Switching Time Test Circuit



Unit (resistance:Ω, capacitance:F)

Package Dimensions 2039D
(unit:mm)



1:Base
2:Collector
3:Emitter

SANYO:TO3PML

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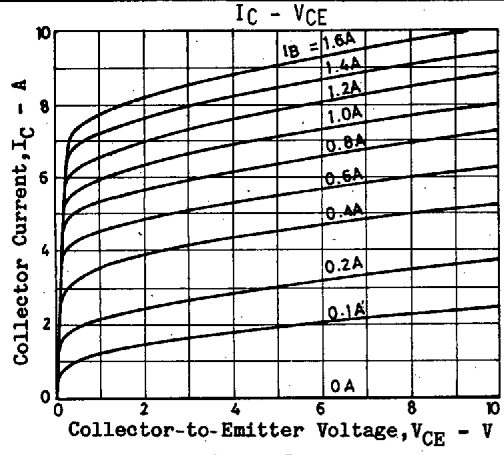
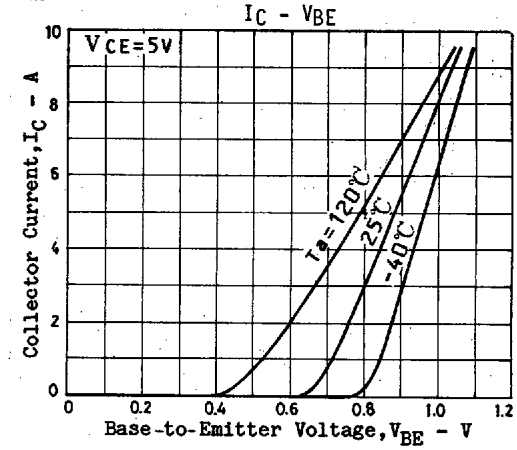
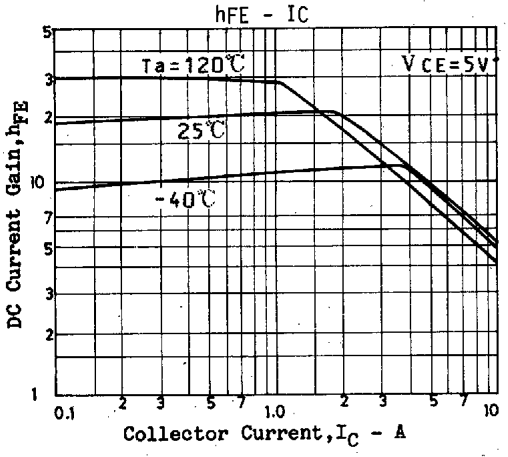
I_C - V_{CE}



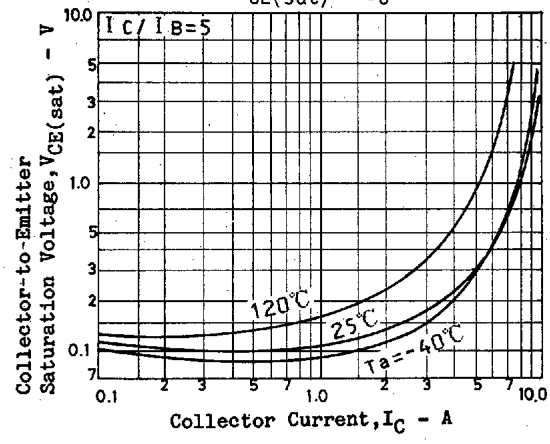
I_C - V_{BE}



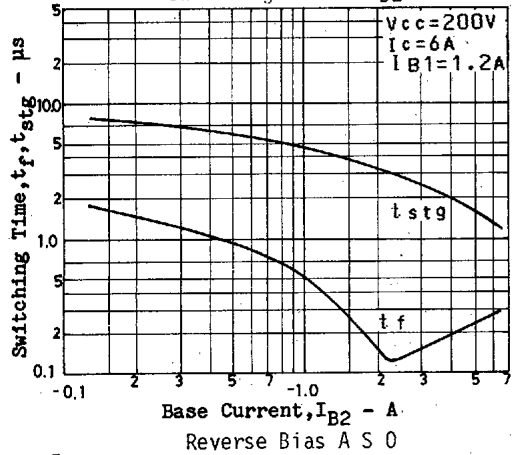
hFE - IC



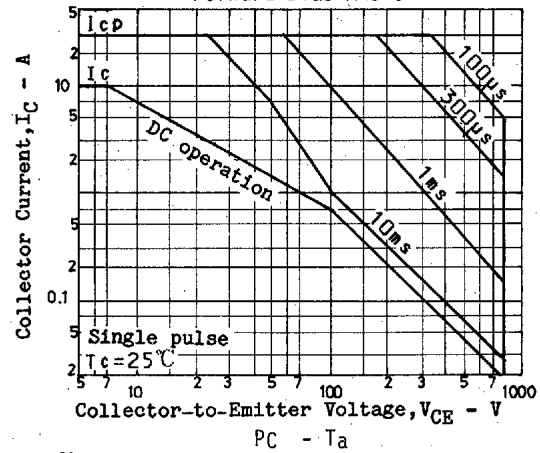
$V_{CE(sat)}$ - I_C



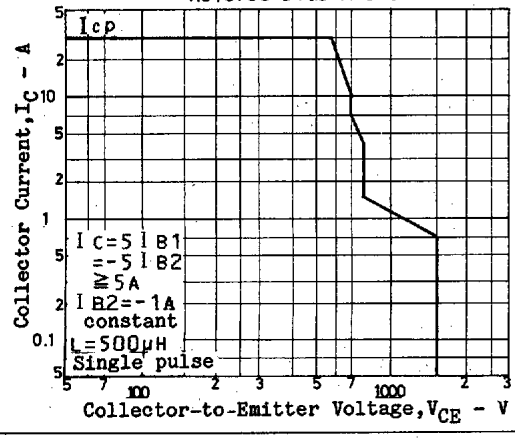
Switching Time - I_{B2}



Forward Bias A S O



Reverse Bias A S O



PC - Ta