Ordering number: EN1626C

SANYO

No.1626C

2SC3642

NPN Triple Diffused Planar Silicon Transistor

Ultrahigh-Definition Display Horizontal Deflection Output Applications

Features

- High reliability (Adoption of HVP process).
- High speed.
- High breakdown voltage.
- Adoption of MBIT process.

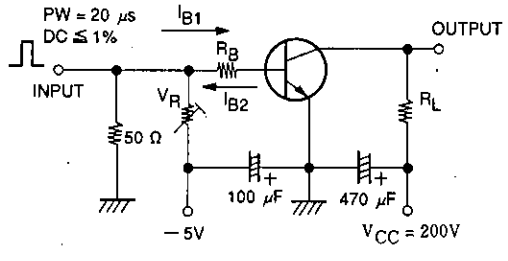
Absolute Maximum Ratings at Ta = 25°C

				unit
Collector-to-Base Voltage	V_{CBO}		1200	V
Collector-to-Emitter Voltage	V_{CEO}		800	V
Emitter-to-Base Voltage	V_{EBO}		7	V
Collector Current	I_C		6	A
Collector Current (Pulse)	I_{CP}		12	A
Collector Dissipation	P_C	Tc = 25°C	100	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		−55 to +150	°C

Electrical Characteristics at Ta = 25°C

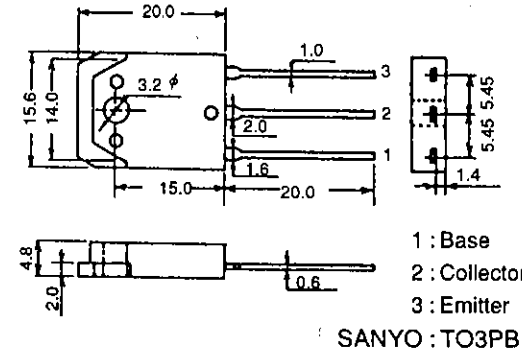
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 800V, I_E = 0			10	μA
	I_{CES}	V_{CE} = 1200V, R_{BE} = 0			0.5	mA
C-E Sustaining Voltage	$V_{CEO(sus)}$	I_C = 100mA, I_B = 0	800			V
Emitter Cutoff Current	I_{EBO}	V_{EB} = 5V, I_C = 0			1	mA
C-E Saturation Voltage	$V_{CE(sat)}$	I_C = 4A, I_B = 0.8A			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C = 4A, I_B = 0.8A			1.5	V
DC Current Gain	h_{FE}	V_{CE} = 5V, I_C = 0.8A	8			
Storage Time	t_{stg}	I_C = 4A, I_{B1} = 0.8A, I_{B2} = −1.6A			3.0	μs
Fall Time	t_f	I_C = 4A, I_{B1} = 0.8A, I_{B2} = −1.6A		0.1	0.2	μs

Switching Time Test Circuit



Package Dimensions 2022A

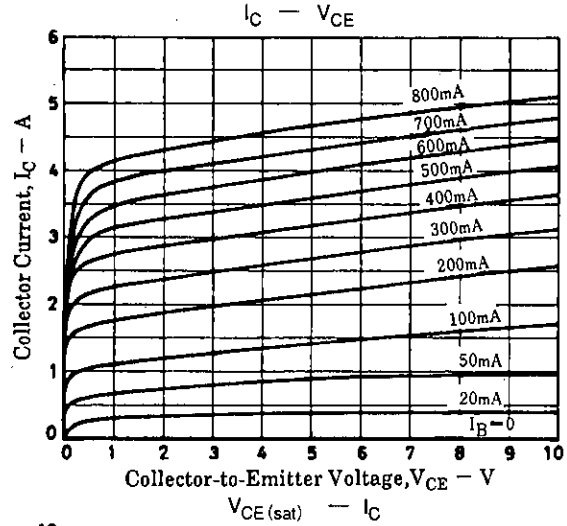
(unit : mm)



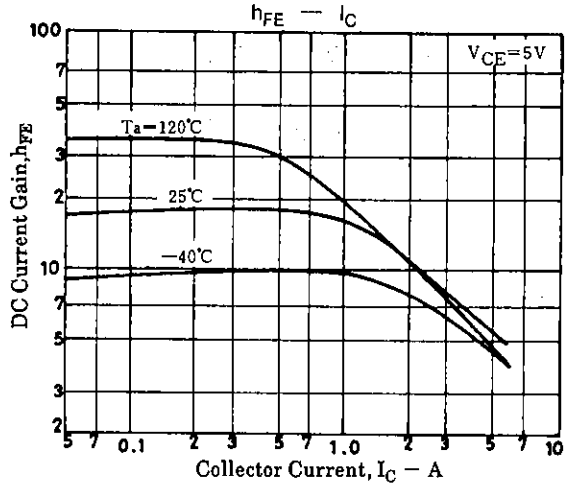
1 : Base
2 : Collector
3 : Emitter

SANYO : TO3PB

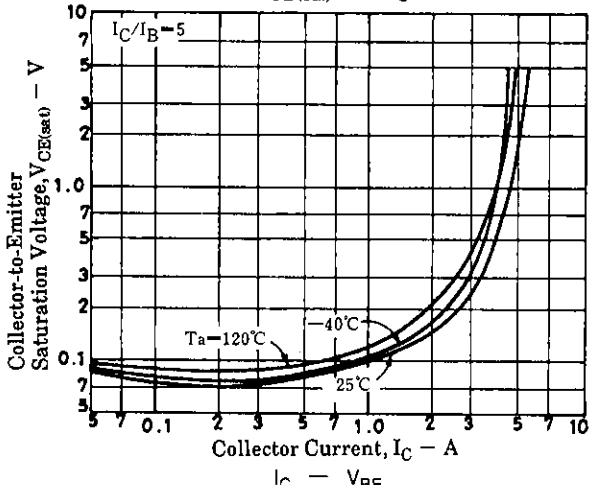
I_C — V_{CE}



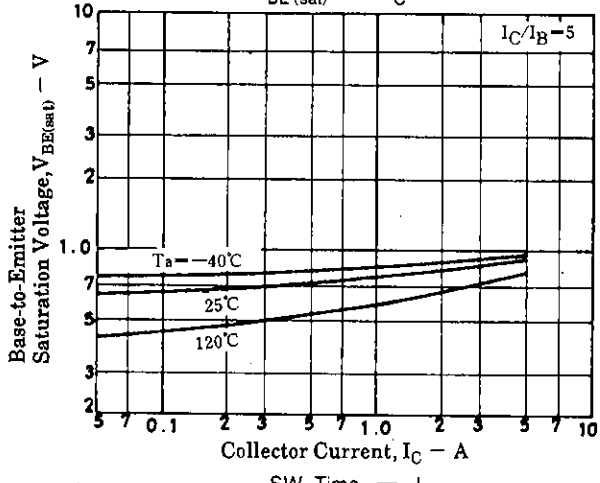
h_{FE} — I_C



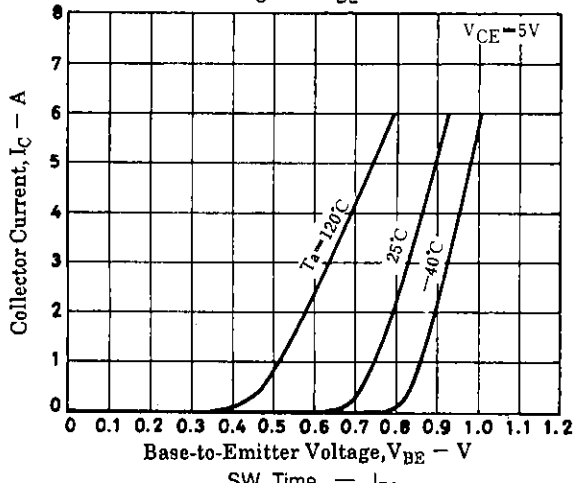
$V_{CE(sat)}$ — I_C



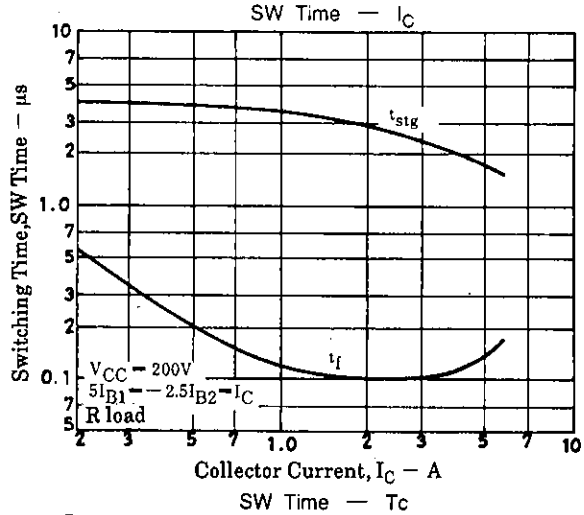
$V_{BE(sat)}$ — I_C



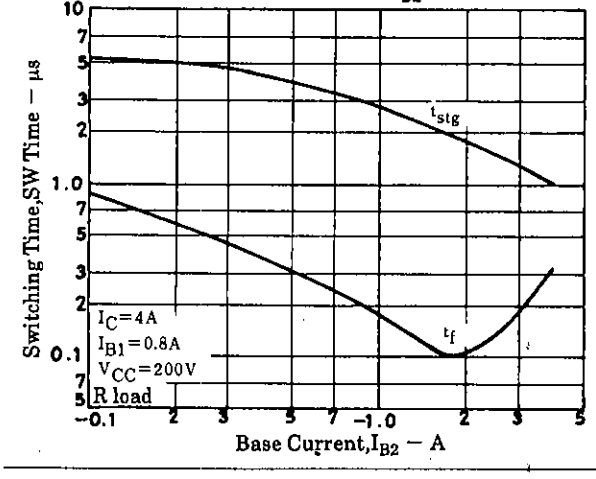
I_C — V_{BE}



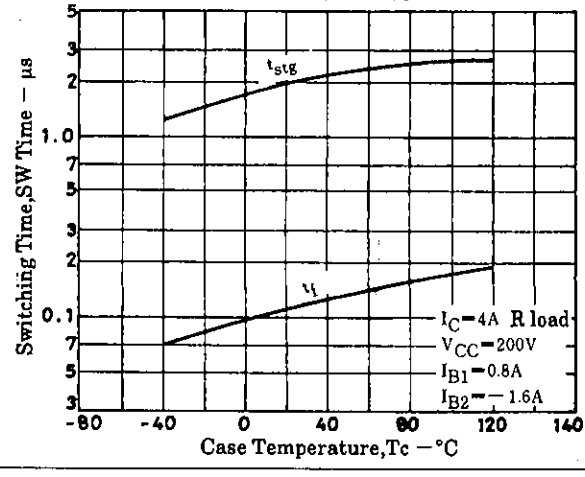
SW Time — I_C



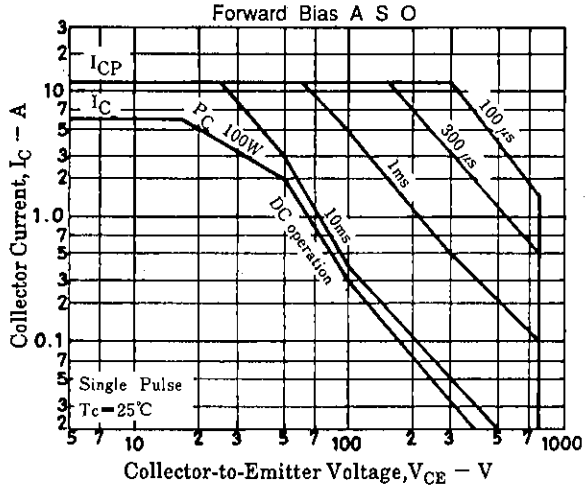
SW Time — I_{B2}



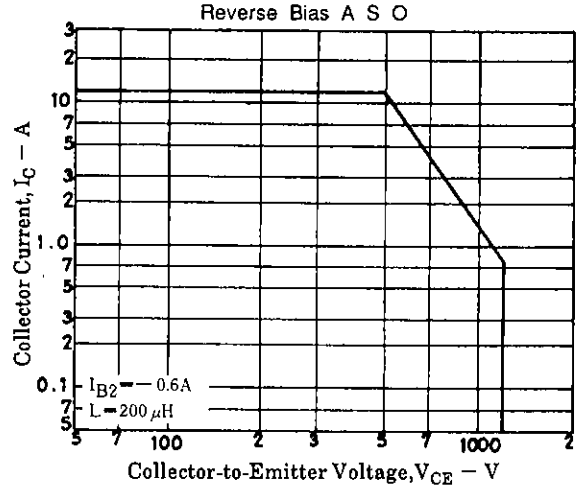
SW Time — Tc



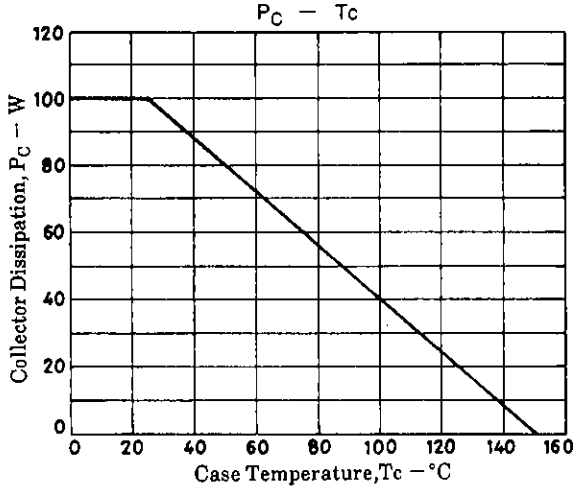
Forward Bias A S O



Reverse Bias A S O



P_C – Tc



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