Ordering number:EN1614C

NPN Triple Diffused Planar Silicon Transistor

2SC3636

Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

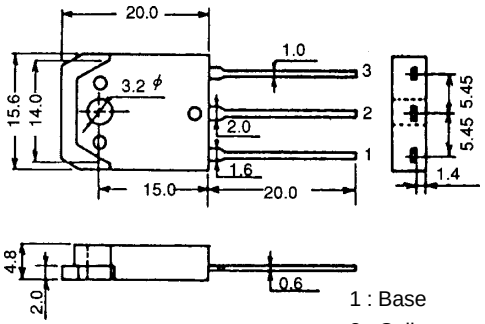
Features

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

Package Dimensions

unit:mm

2022A



1 : Base
2 : Collector
3 : Emitter
SANYO : TO-3PB

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		900	V
Collector-to-Emitter Voltage	V_{CEO}		500	V
Emitter-to-Base Voltage	V_{EBO}		7	V
Collector Current	I_C		7	A
Collector Current (Pulse)	I_{CP}		14	A
Collector Dissipation	P_C	Tc=25˚C	80	W
Junction Temperature	Tj		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	V_{CB}=500V, I_E=0			10	μA
	I_{CES}	V_{CE}=900V, R_{BE}=0			0.5	mA
Collector-to-Emitter Sastain Voltage	$V_{CEO(sus)}$	I_C=100mA, I_B=0	500			V
Emitter Cutoff Current	I_{EBO}	V_{EB}=5V, I_C=0			1	mA
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=4A, I_B=0.8A			2	V
Base-to-Emitter 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

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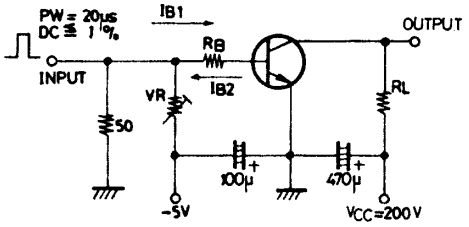
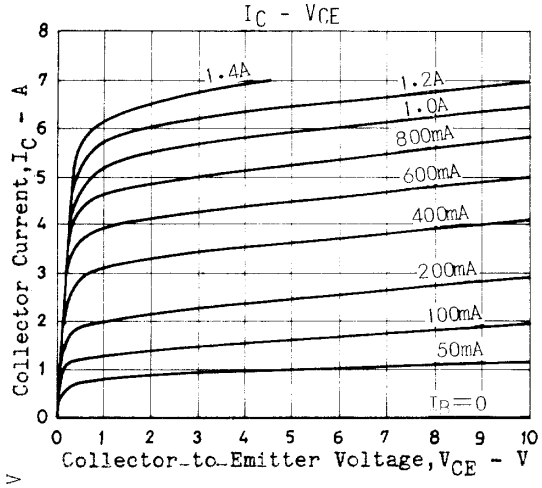
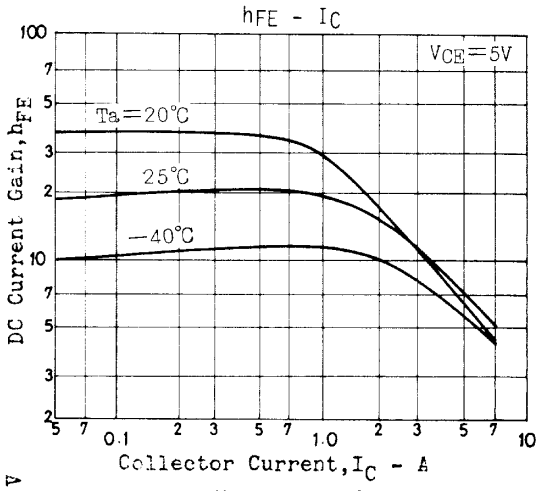
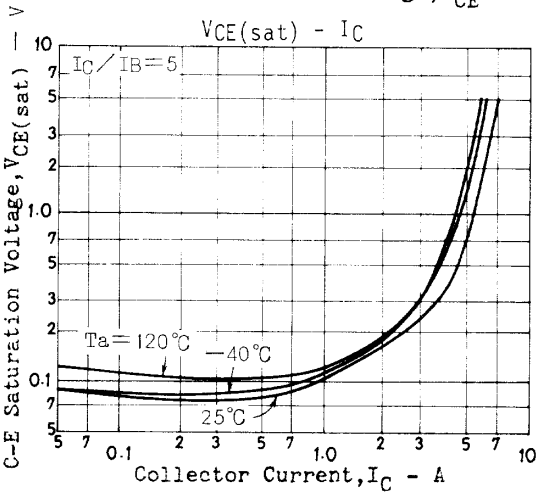
Switching Time Test Circuit

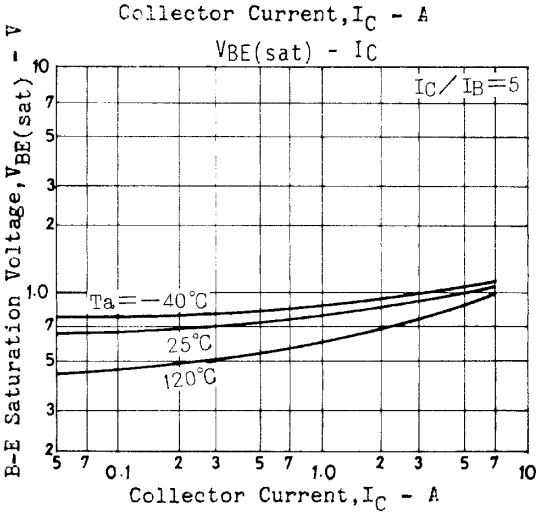


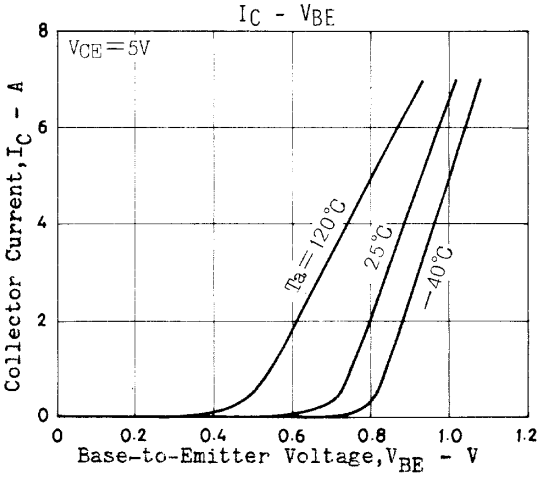
Unit (resistance:Ω, capacitance:F)

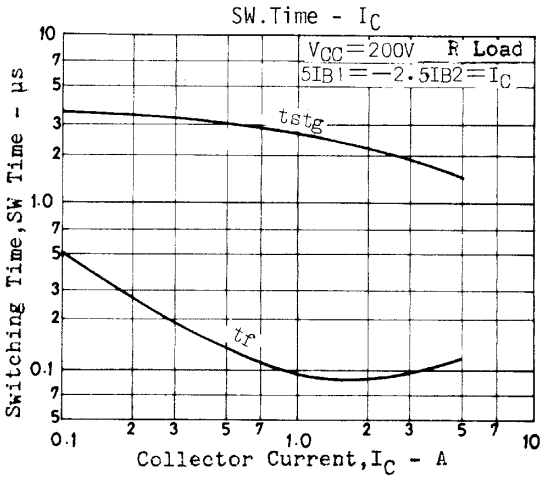


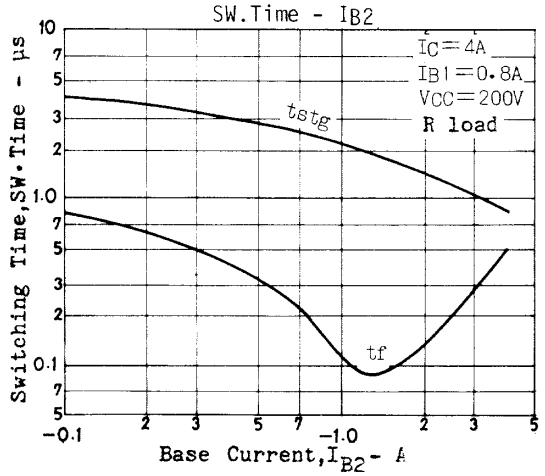


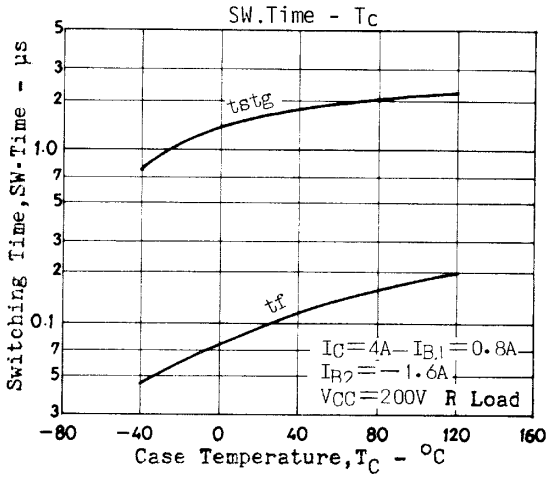


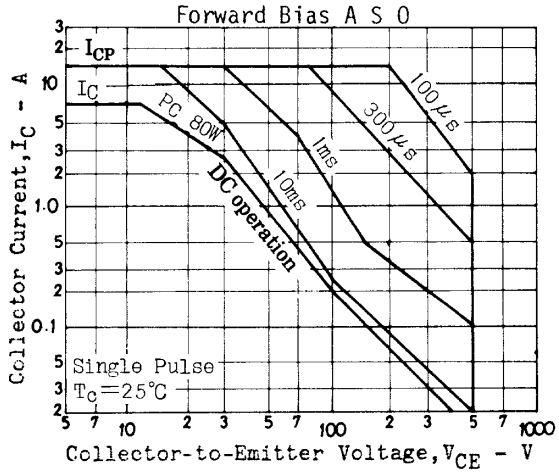


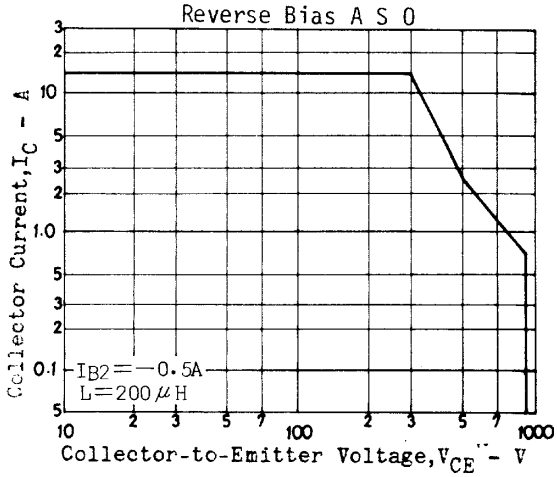


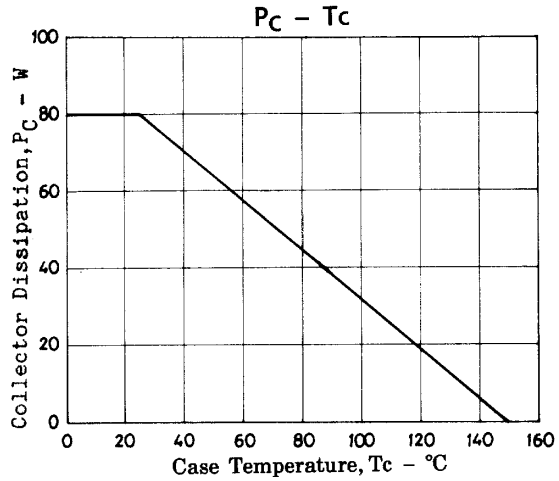



SW.Time - IB2
IC=4A
IB1=0.8A
VCC=200V
R load
tstg
tf
Switching Time,SW.Time - μs
Base Current,IB2 - A


SW.Time - Tc
tstg
tf
IC=4A IB1=0.8A
IB2=−1.6A
VCC=200V R Load
Switching Time,SW.Time - μs
Case Temperature,Tc - °C


Forward Bias A S O
ICP
IC
PC 80W
DC operation
100μs
300μs
1ms
10ms
Single Pulse
Tc=25°C
Collector Current,IC - A
Collector-to-Emitter Voltage,VCE - V


Reverse Bias A S O
IB2=−0.5A
L=200μH
Collector Current,IC - A
Collector-to-Emitter Voltage,VCE - V


PC - Tc
Collector Dissipation,PC - W
Case Temperature,Tc - °C