Ordering number:EN1626C

NPN Triple Diffused Planar Silicon Transistor

2SC3642

Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

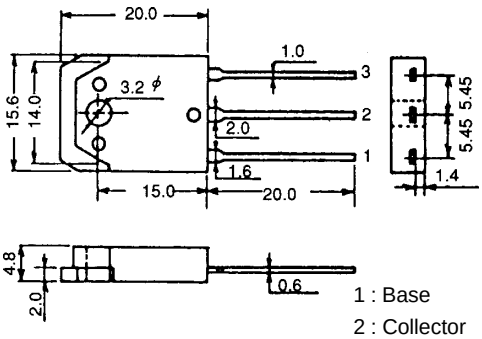
Features

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

Package Dimensions

unit:mm

2022A



Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	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

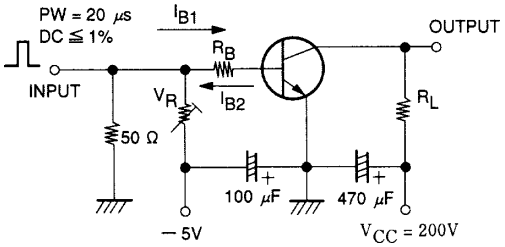
Electrical Characteristics at Ta = 25˚C

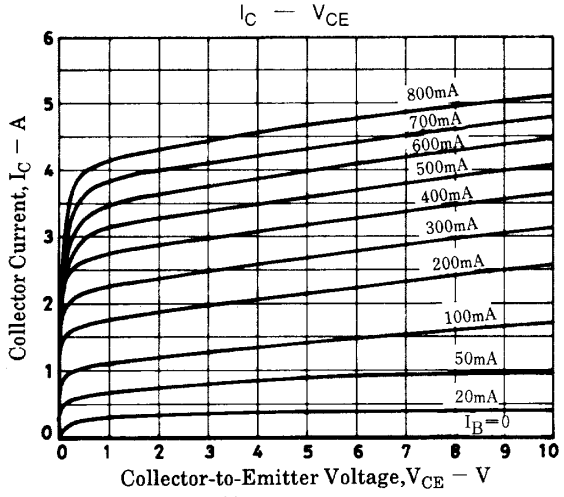
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	V_{CB}=800V, I_E=0			10	μA
	I_{CES}	V_{CE}=1200V, R_{BE}=0			0.5	mA
Collector-to-Emitter Sastain Voltage	$V_{CEO(sus)}$	I_C=100mA, I_B=0	800			V
Emitter Cutoff Current	I_{EBO}	V_{EB}=5V, I_C=0			1	mA
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=4A, I_B=0.8A			5	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

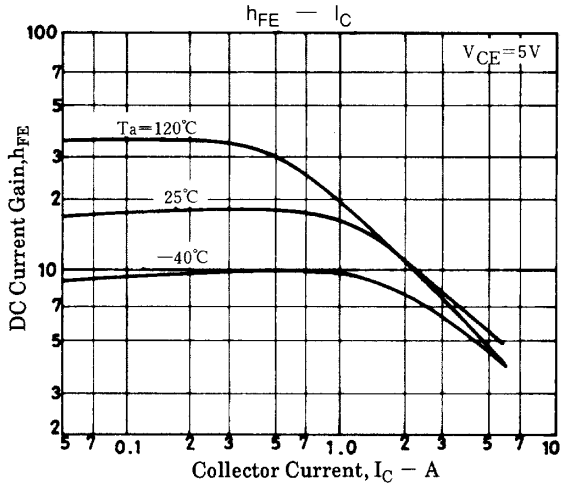
SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters

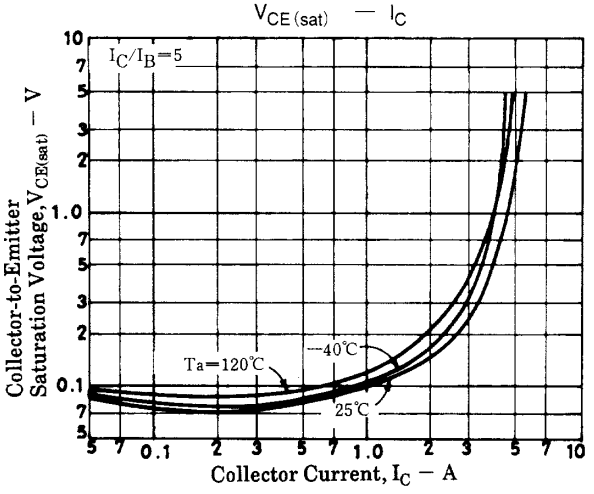
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

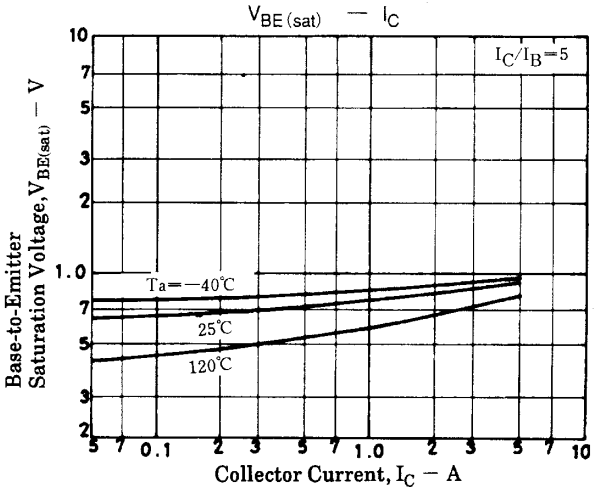
Switching Time Test Circuit

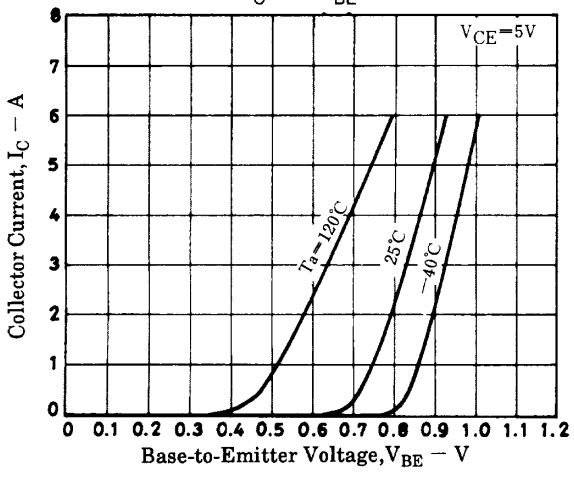


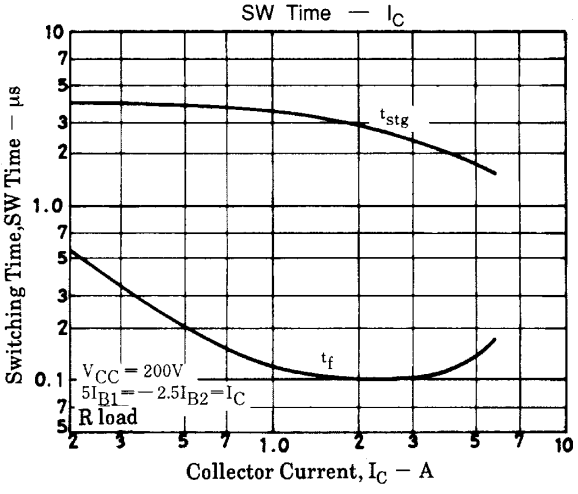




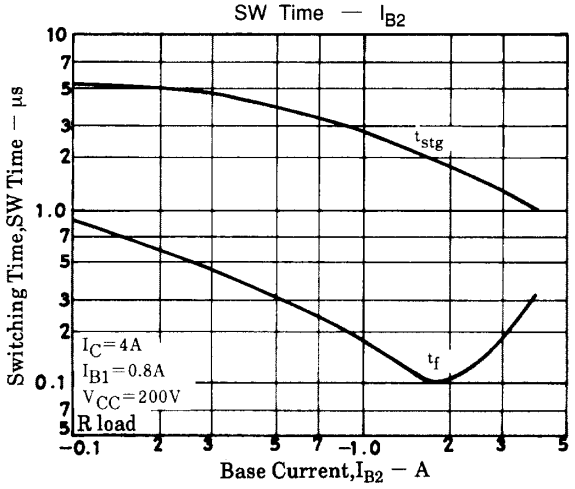




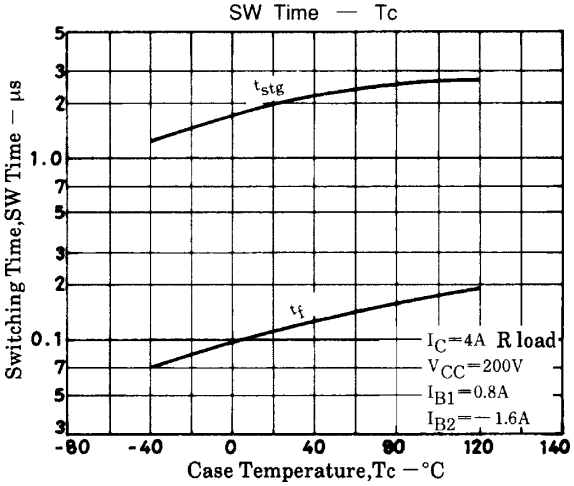




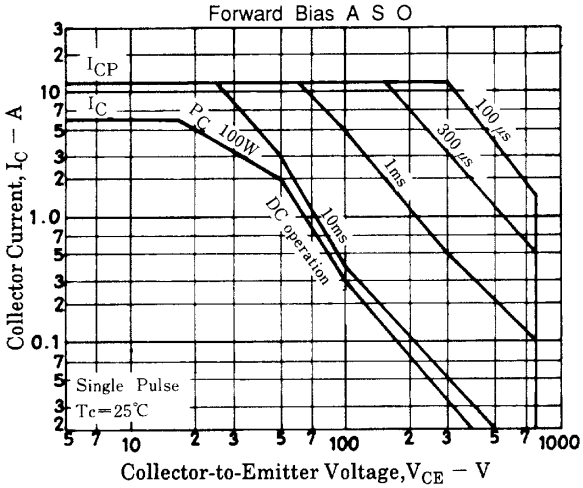
SW Time — I_{B2}



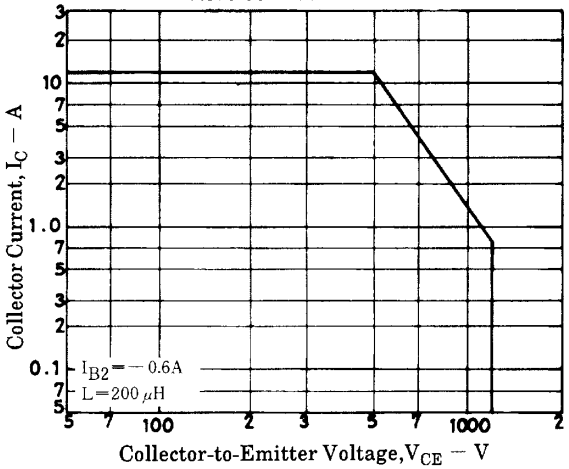
SW Time — Tc



Forward Bias A S O



Reverse Bias A S O



P_C — Tc