

**2SC3642**

## Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

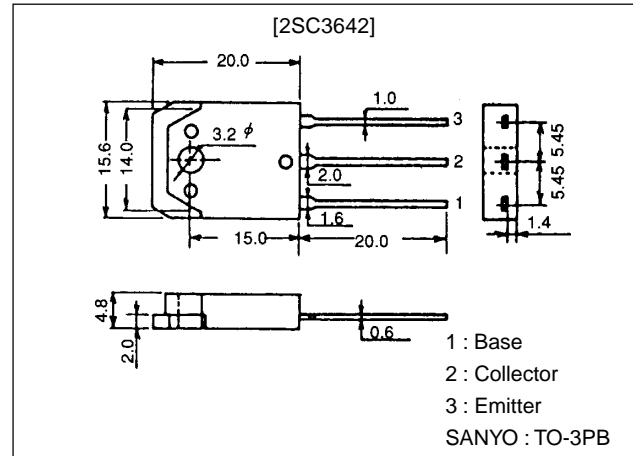
### Features

- 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	$V_{CB0}$		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	$P_C$	$T_c=25^\circ\text{C}$	100	W
Junction Temperature	$T_j$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=800\text{V}, I_E=0$			10	$\mu\text{A}$
	$I_{CES}$	$V_{CE}=1200\text{V}, R_{BE}=0$			0.5	mA
Collector-to-Emitter Sustain Voltage	$V_{CEO(sus)}$	$I_C=100\text{mA}, I_B=0$	800			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			1	mA
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4\text{A}, I_B=0.8\text{A}$			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4\text{A}, I_B=0.8\text{A}$			1.5	V
DC Current Gain	$h_{FE}$	$V_{CE}=5\text{V}, I_C=0.8\text{A}$	8			
Storage Time	$t_{stg}$	$I_C=4\text{A}, I_{B1}=0.8\text{A}, I_{B2}=-1.6\text{A}$			3.0	$\mu\text{s}$
Fall Time	$t_f$	$I_C=4\text{A}, I_{B1}=0.8\text{A}, I_{B2}=-1.6\text{A}$		0.1	0.2	$\mu\text{s}$

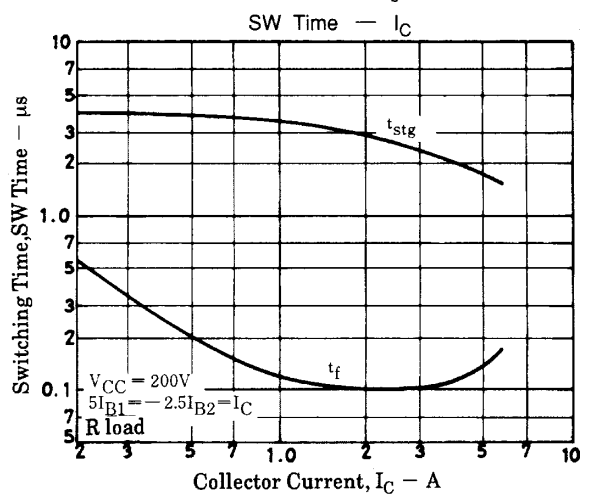
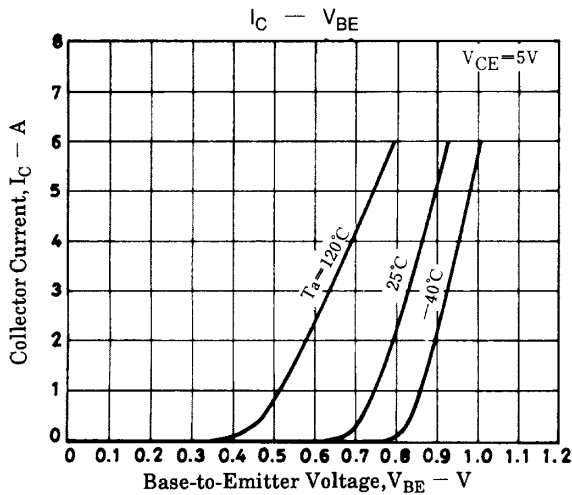
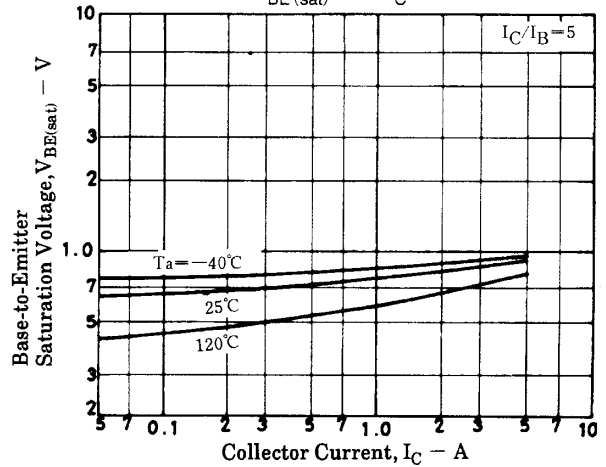
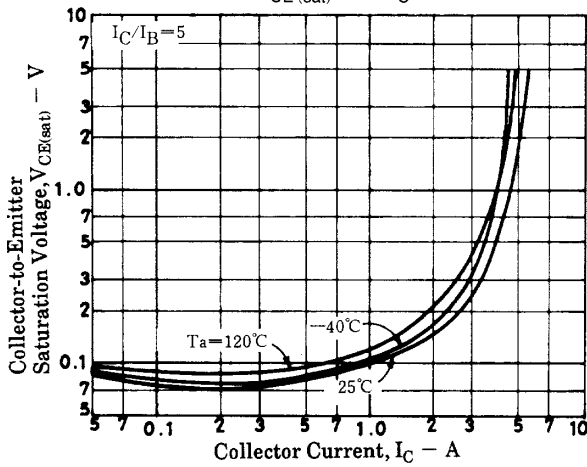
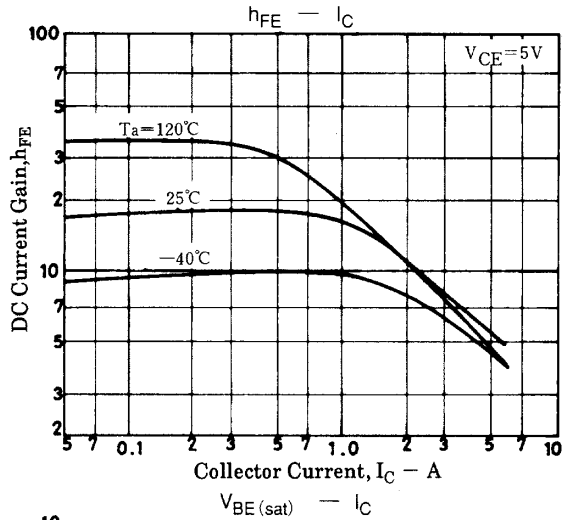
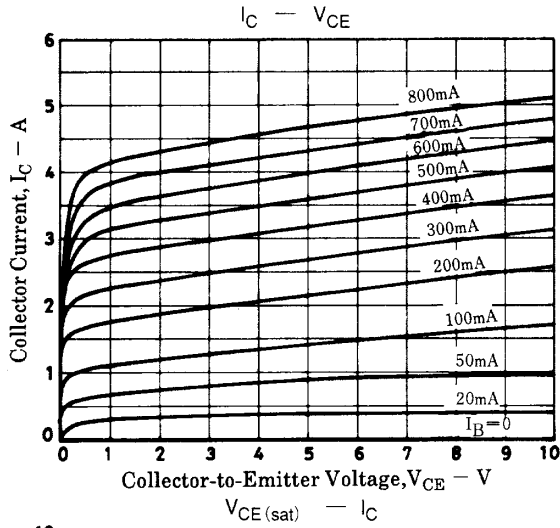
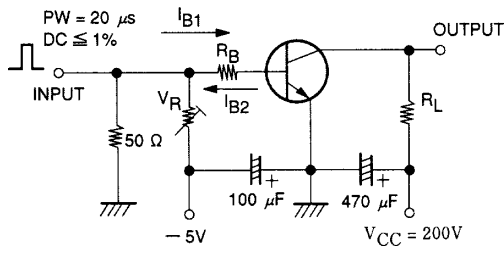
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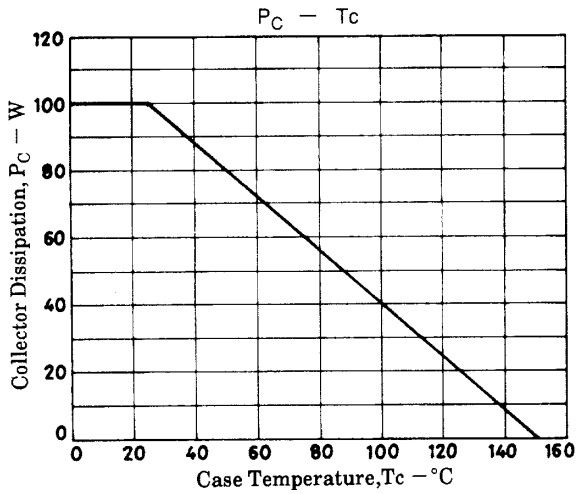
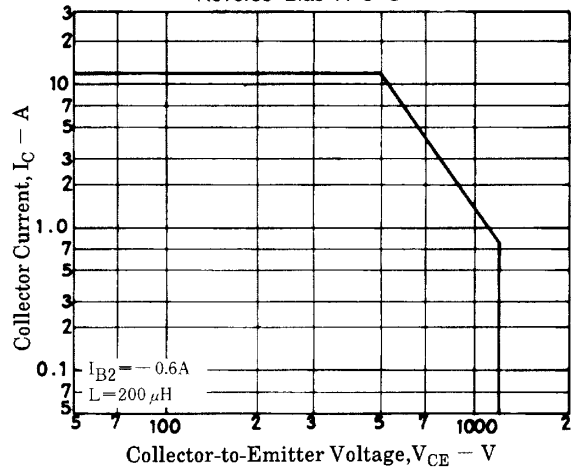
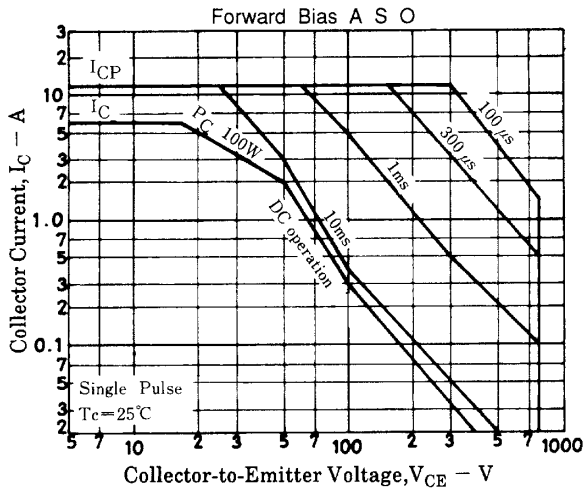
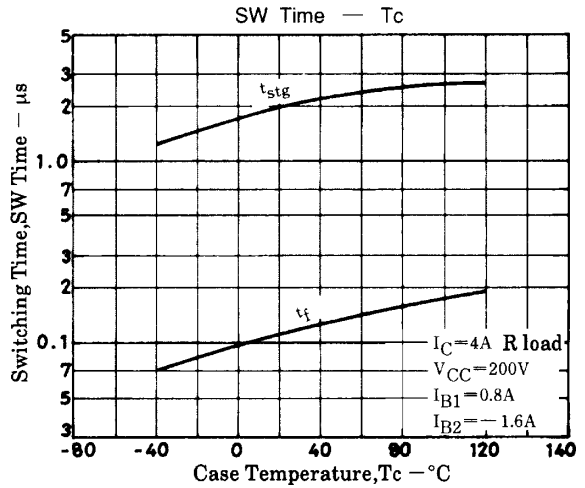
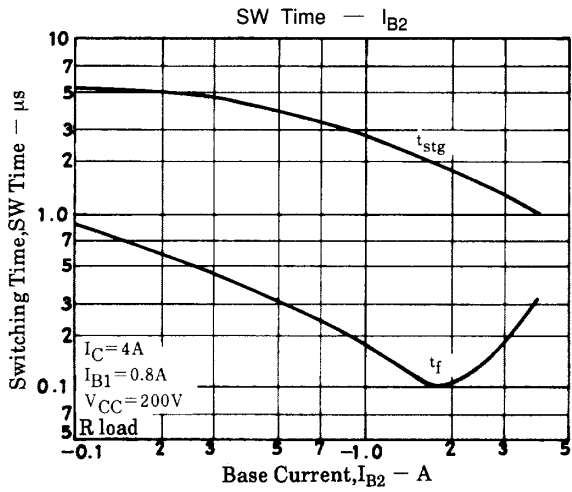
**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

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

Switching Time Test Circuit



# 2SC3642



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