

**2SC3688**

Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

Applications

- Ultrahigh-definition color display horizontal deflection output.

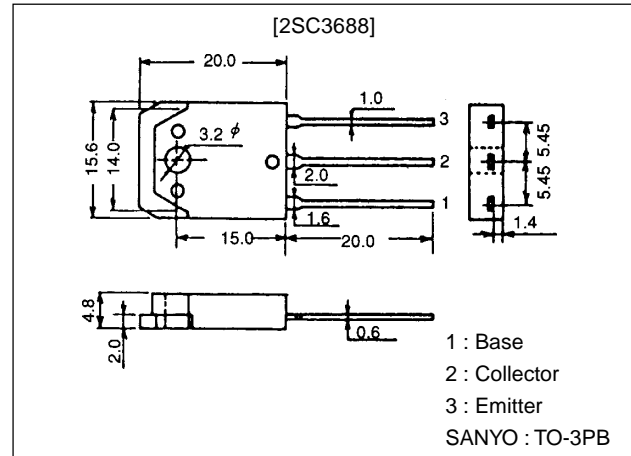
Features

- Fast speed ($t_f=100\text{ns}$ typ).
- High breakdown voltage ($V_{CBO}=1500\text{V}$).
- High reliability (adoption of HVP process).
- Adoption of MBIT process.

Package Dimensions

unit:mm

2022A



Specifications

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Condition	Rating	Uni
Collector-to-Base Voltage	CBO		1500	
Collector-to-Emitter Voltage	CEO		800	
Emitter-to-Base Voltage	EBO		6V	
Collector Current	C		1A	
Collector Current (Pulse)	CP		2A	
Collector Dissipation	C	$T_c=25^\circ\text{C}$	100	
Junction Temperature	T		150	$^\circ\text{C}$
Storage Temperature	Tst		-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			mA	mA	mA	
Collector Cutoff Current	I_{CES}	$V_{CE}=1500\text{V}, R_{BE}=0$			1A	m
Collector-to-Emitter Sustain Voltage	$CEO(sus)$	$I_C=100\text{mA}, I_B=0$	80			
Emitter Cutoff Current	EBO	$V_{EB}=4\text{V}, I_C=0$			1A	m
Collector-to-Emitter Saturation Voltage	$CE(sat)$	$I_C=8\text{A}, I_B=2.0\text{A}$			5V	
Base-to-Emitter Saturation Voltage	$BE(sat)$	$I_C=8\text{A}, I_B=2.0\text{A}$			1V	
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}, I_C=1.0\text{A}$	8			
Storage Time	stg	$I_C=6\text{A}, I_{B1}=1.2\text{A}, I_{B2}=-2.4\text{A}$			3s	μ
Fall Time	f	$I_C=6\text{A}, I_{B1}=1.2\text{A}, I_{B2}=-2.4\text{A}$		0.2	0s	μ

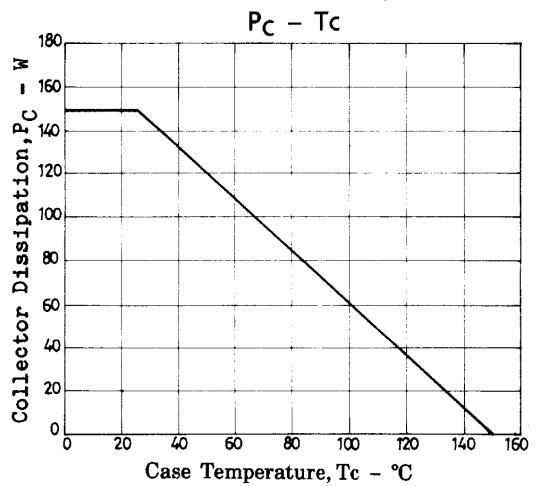
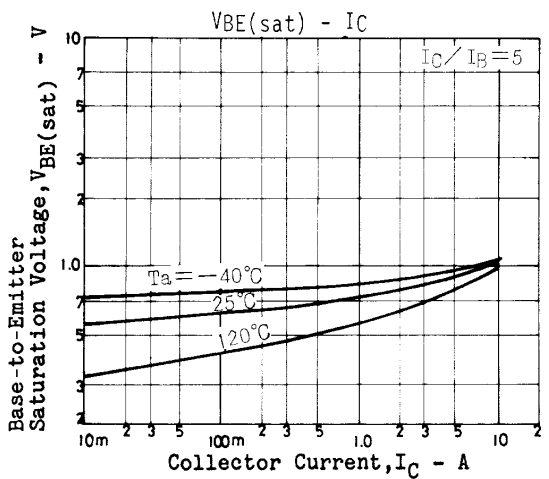
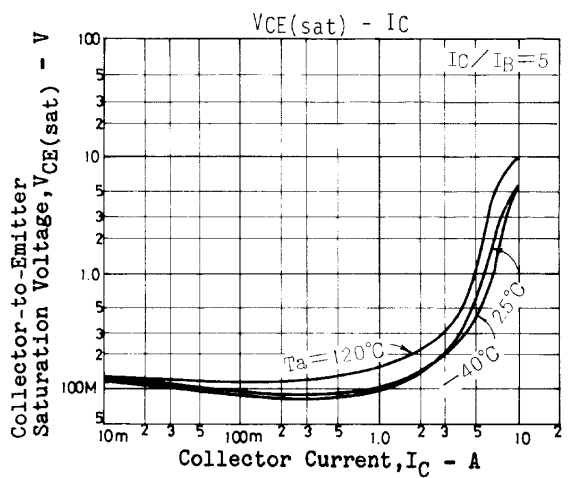
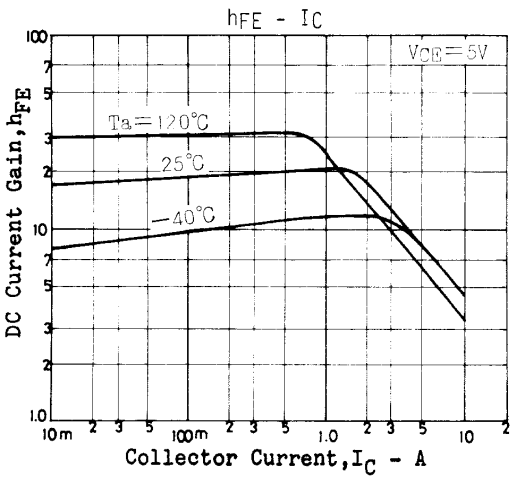
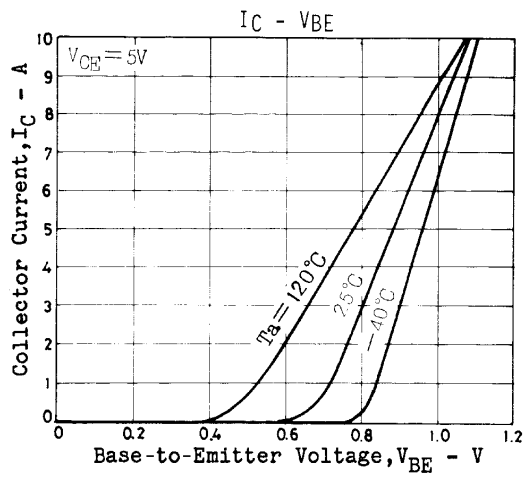
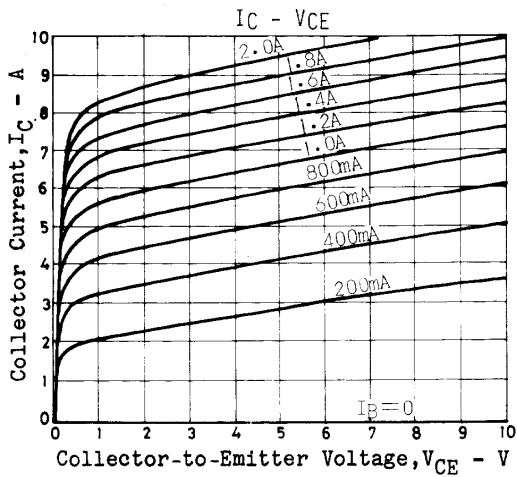
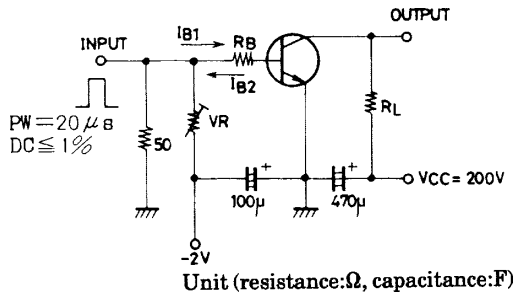
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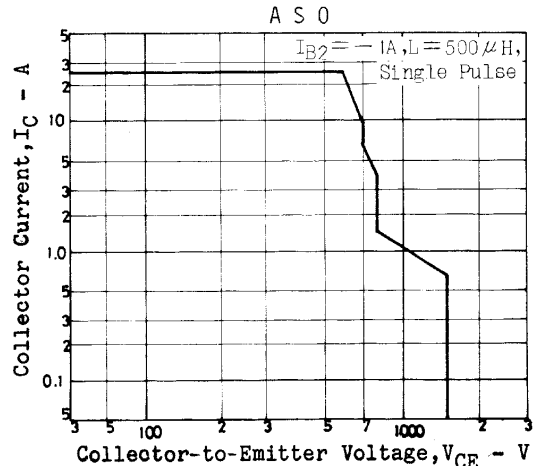
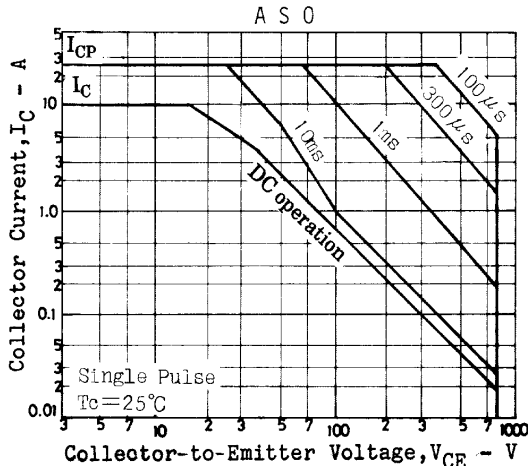
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Switching Time Test Circuit





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