

**2SC5968**

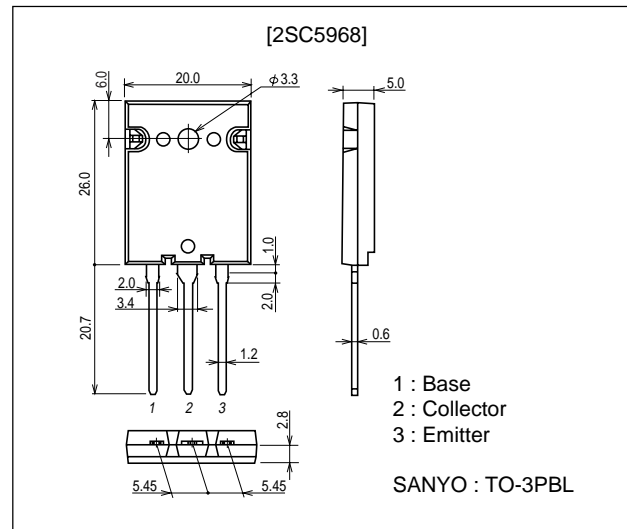
## Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

### Features

- High-speed.
- High breakdown voltage ( $V_{CB0}=1700V$ ).
- High reliability (Adoption of HVP process).
- Adoption of MBIT process.

### Package Dimensions

unit : mm  
2048B



### Specifications

#### Absolute Maximum Ratings at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		1700	V
Collector-to-Emitter Voltage	$V_{CEO}$		800	V
Emitter-to-Base Voltage	$V_{EBO}$		5	V
Collector Current	$I_C$		25	A
Collector Current (Pulse)	$I_{CP}$		50	A
Collector Dissipation	$P_C$		3.5	W
		$T_c=25^\circ C$	210	W
Junction Temperature	$T_J$		150	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ C$

#### Electrical Characteristics at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CB0}$	$V_{CB}=800V, I_E=0$			10	$\mu A$
	$I_{CES}$	$V_{CE}=1700V, R_{BE}=0$			1.0	mA
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, R_{BE}=\infty$	800			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			1.0	mA

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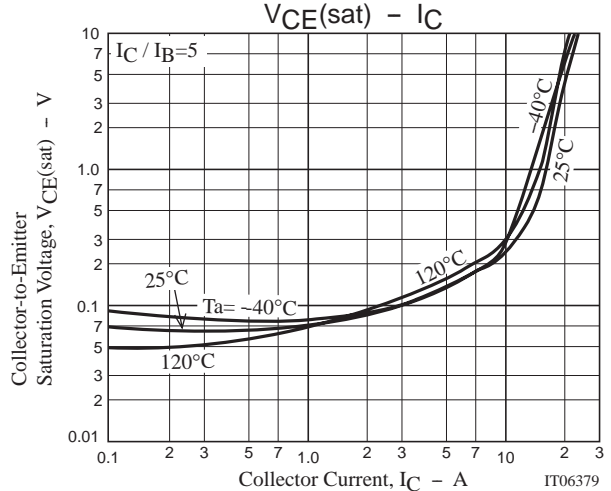
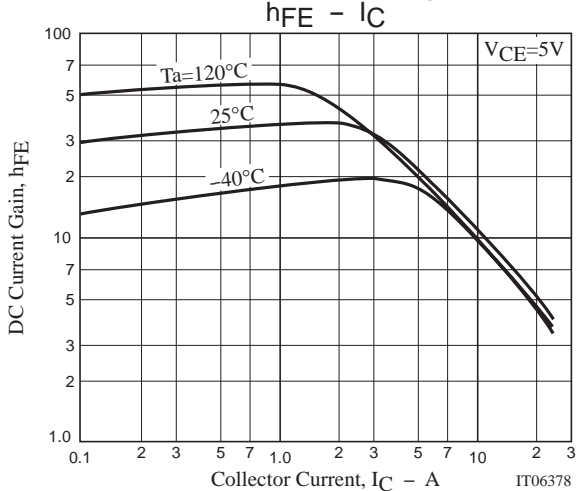
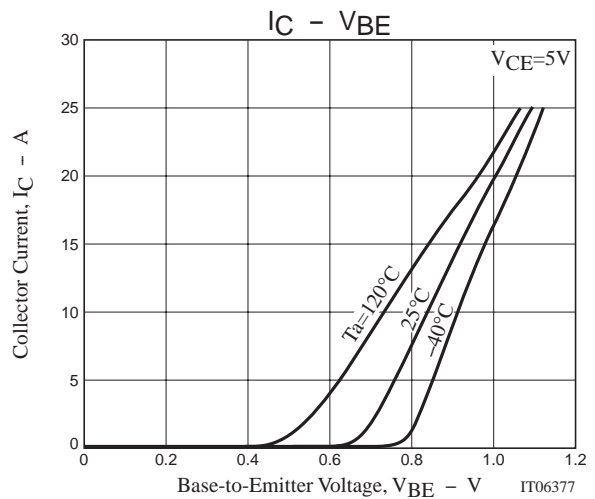
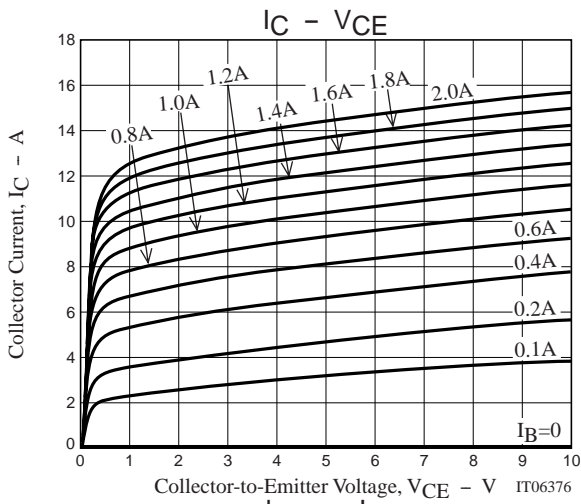
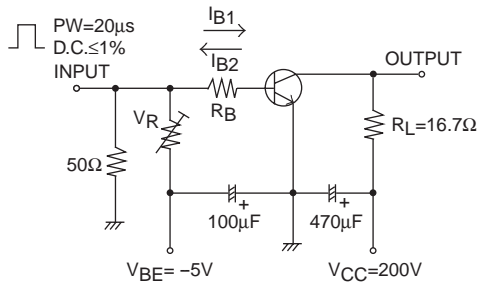
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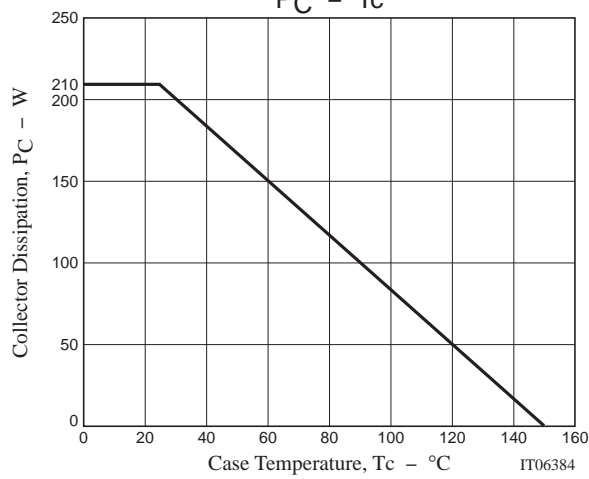
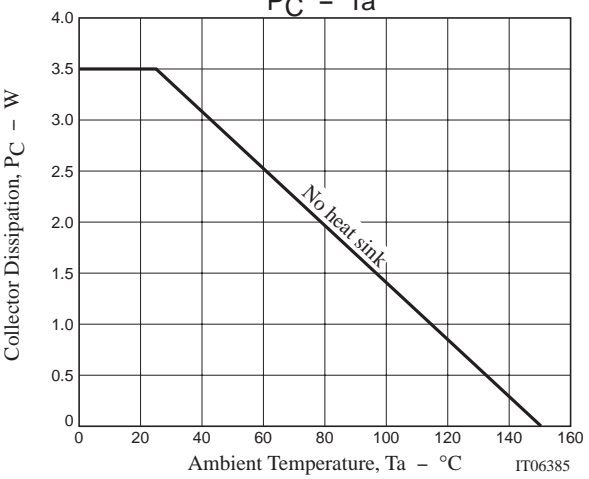
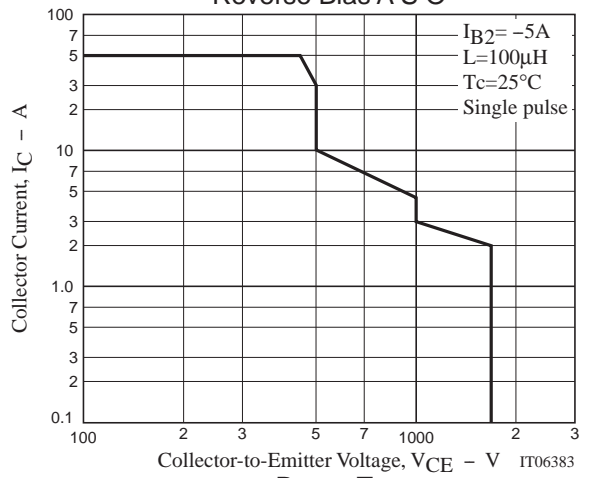
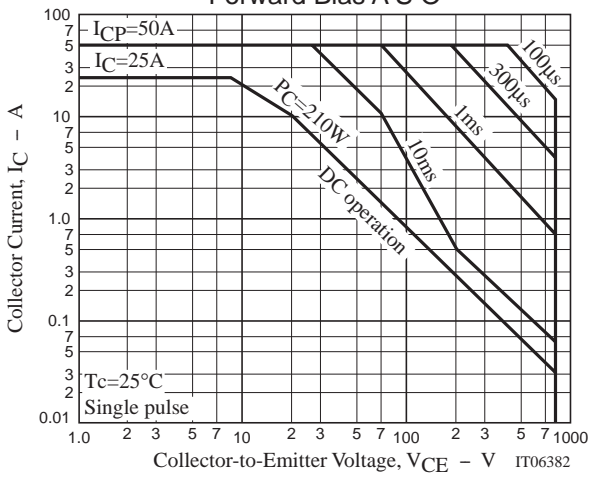
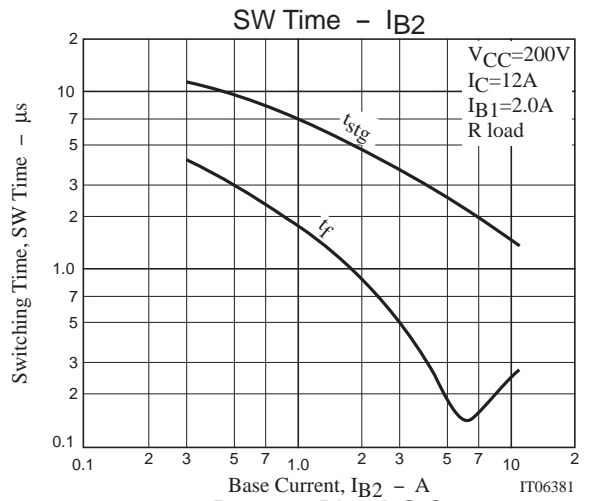
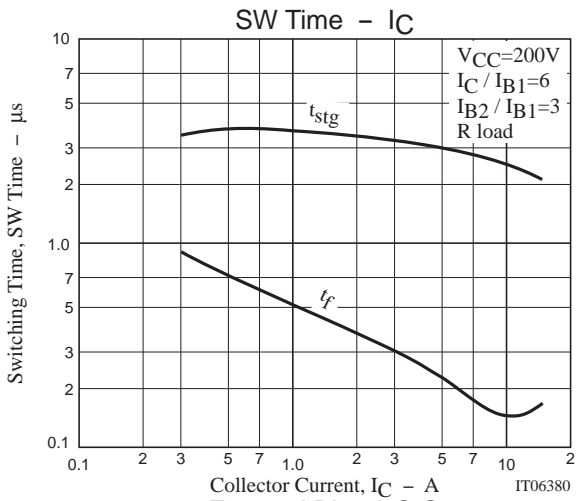
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
DC Current Gain	hFE1	VCE=5V, IC=1A	15			
	hFE2	VCE=5V, IC=18A	4		7	
Collector-to-Emitter Saturation Voltage	VCE(sat)	IC=16A, IB=4A			3	V
Base-to-Emitter Saturation Voltage	VBE(sat)	IC=16A, IB=4A			1.5	V
Storage Time	tstg	IC=12A, IB1=2.0A, IB2=-6.0A			3.0	μs
Fall Time	tf	IC=12A, IB1=2.0A, IB2=-6.0A			0.2	μs

Switching Time Test Circuit





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