



# SANYO Semiconductors

## DATA SHEET

# 2SC5793 — NPN Triple Diffused Planar Silicon Transistor

## Ultrahigh-Definition CRT Display

## Horizontal Deflection Output Applications

### Features

- High speed.
- High breakdown voltage ( $V_{CBO}=1600V$ ).
- High reliability (Adoption of HVP process).
- Adoption of MBIT process.

### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CBO}$		1600	V
Collector-to-Emitter Voltage	$V_{CEO}$		800	V
Emitter-to-Base Voltage	$V_{EBO}$		5	V
Collector Current	$I_C$		20	A
Collector Current (Pulse)	$I_{CP}$		40	A
Collector Dissipation	$P_C$		3.0	W
		$T_c=25^\circ C$	95	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	$I_{CBO}$	$V_{CB}=800V, I_E=0A$			10	$\mu A$
Collector Cutoff Current	$I_{CES}$	$V_{CE}=1600V, R_{BE}=0\Omega$			1.0	mA
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, R_{BE}=\infty$	800			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4V, I_C=0A$			1.0	mA
DC Current Gain	$h_{FE1}$	$V_{CE}=5V, I_C=1A$	10			
	$h_{FE2}$	$V_{CE}=5V, I_C=15A$	4		7	

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13107KD TI IM TC-00000483 / 31504 TS IM TA-100375 No.7451-1/4

# 2SC5793

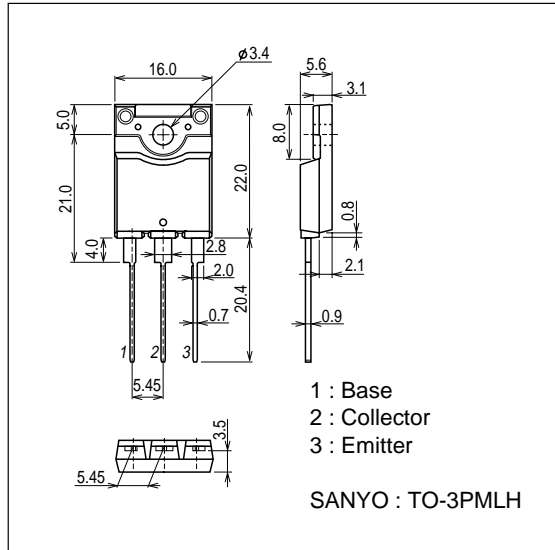
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=13.5A, I_B=3.4A$			3	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=13.5A, I_B=3.4A$			1.5	V
Storage Time	$t_{stg}$	$I_C=10A, I_{B1}=1.6A, I_{B2}=-5A$			3.0	$\mu s$
Fall Time	$t_f$	$I_C=10A, I_{B1}=1.6A, I_{B2}=-5A$			0.2	$\mu s$

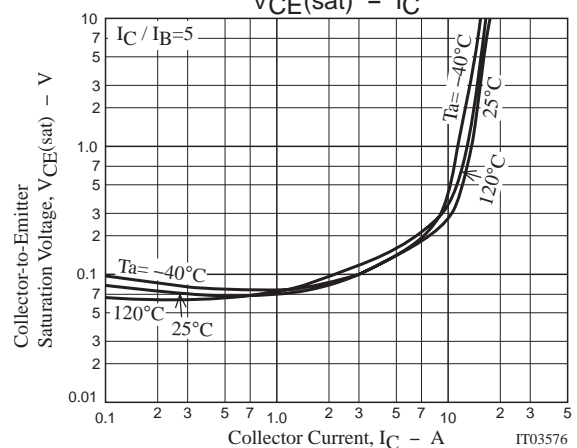
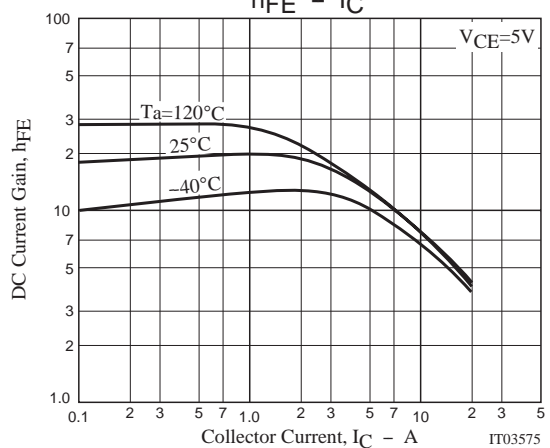
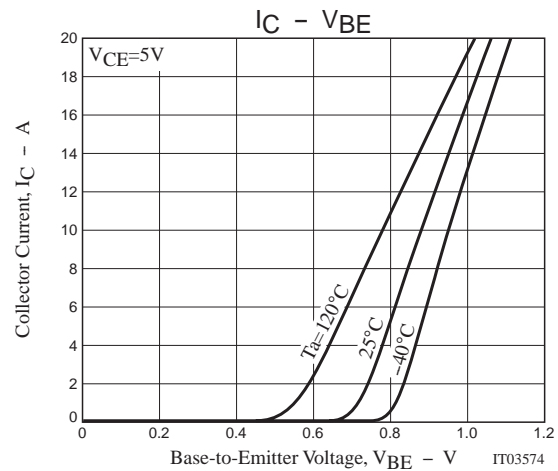
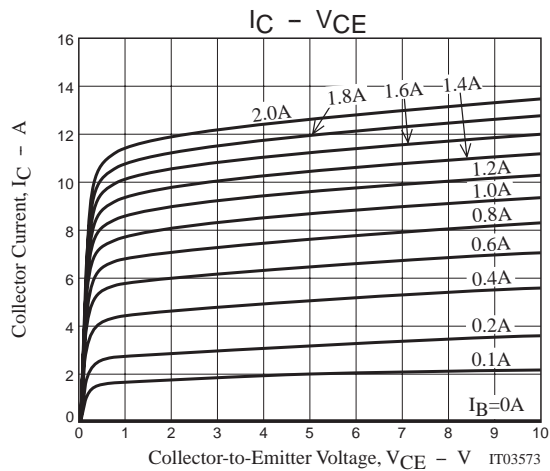
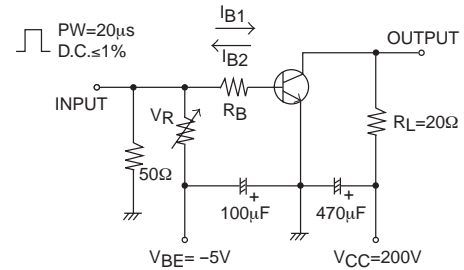
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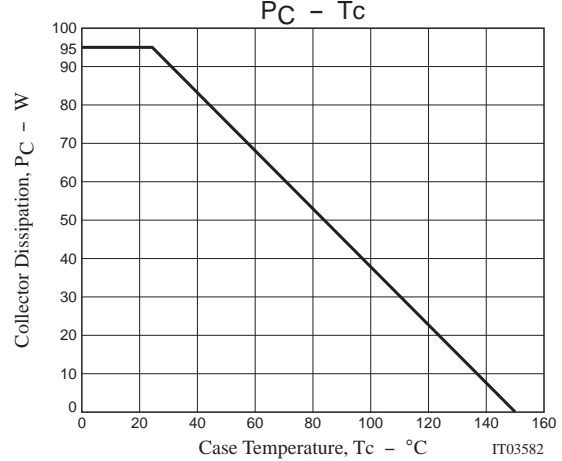
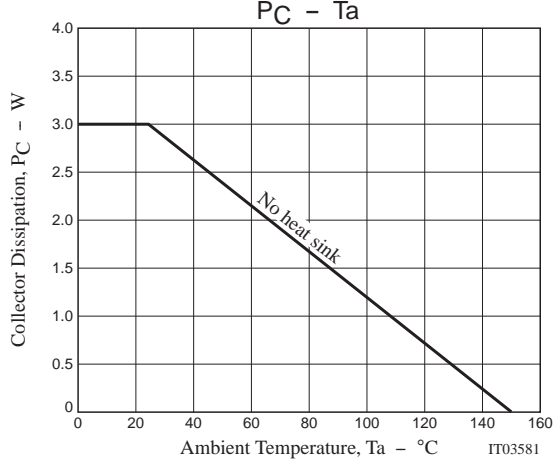
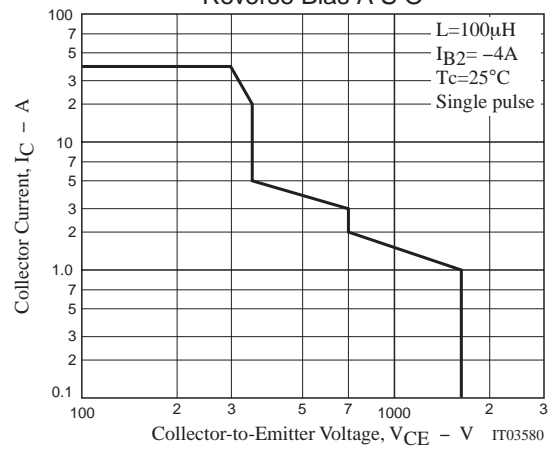
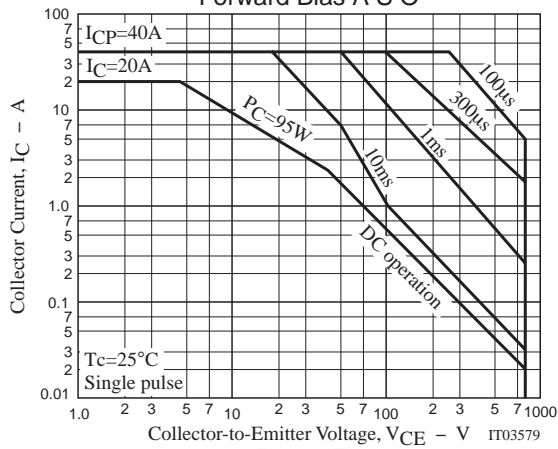
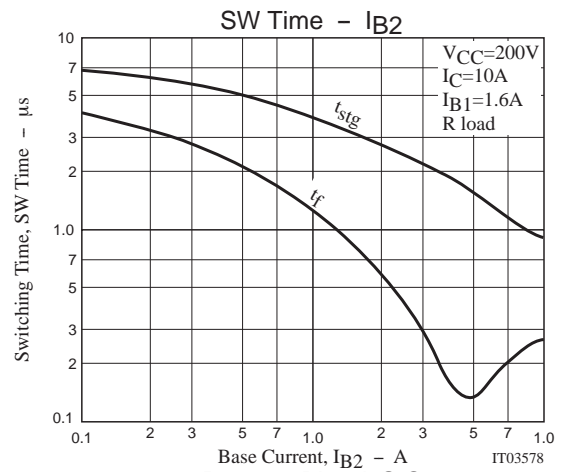
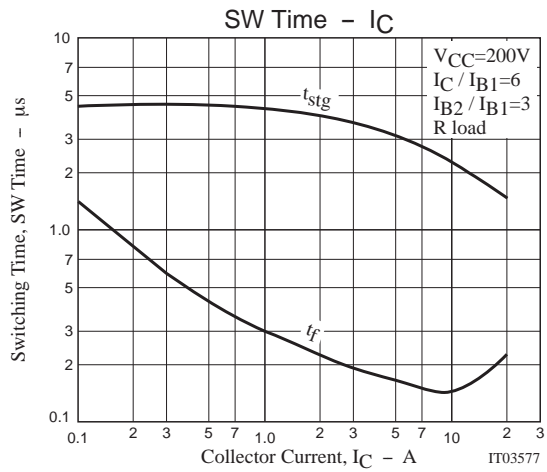
unit : mm (typ)

7504-001



## Switching Time Test Circuit





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