Ordering number : EN7451A

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 Ta=25°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
		Tc=25°C	95	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=0A			10	μA
Collector Cutoff Current	I_{CES}	V_{CE}=1600V, R_{BE}=0Ω			1.0	mA
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I_C=10mA, R_{BE}=∞	800			V
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V, I_C=0A			1.0	mA
DC Current Gain	$h_{FE}1$	V_{CE}=5V, I_C=1A	10			
	$h_{FE}2$	V_{CE}=5V, I_C=15A	4		7	

Continued on next page.

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

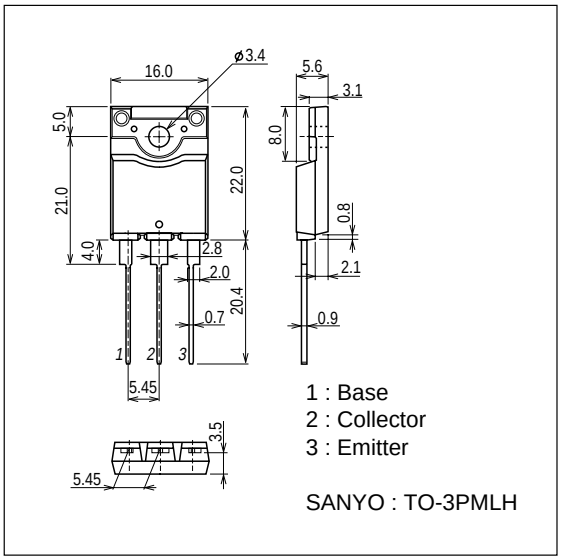
Continued from preceding page.

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	μs
Fall Time	t_f	I_C=10A, I_{B1}=1.6A, I_{B2}=−5A			0.2	μs

Package Dimensions

unit : mm (typ)

7504-001



Switching Time Test Circuit