SANYO No.2750

2SC4438

NPN Triple Diffused Planar Silicon Transistor

Very High-Definition Color Display Horizontal Deflection Output Applications

Features

- High speed(t_f=300ns max).
- High breakdown voltage(V_{CBO}=1500V).
- High reliability (adoption of HVP process).
- Adoption of MBIT process.

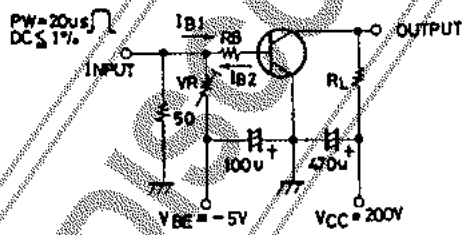
Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V_{CBO}	1500	V
Collector to Emitter Voltage	V_{CEO}	800	V
Emitter to Base Voltage	V_{EBO}	7	V
Collector Current	I_C	6	A
Peak Collector Current	icp	16	A
Collector Dissipation	P_C	50	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55 to +150	°C

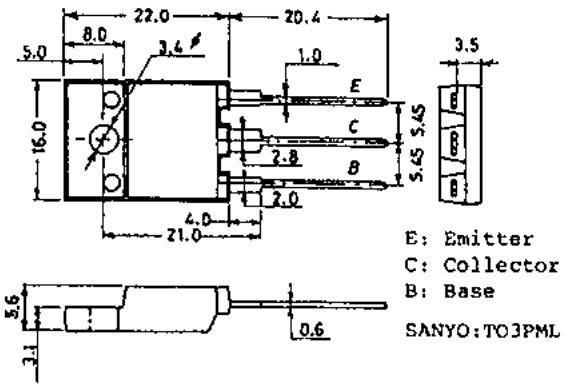
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CES}	V_{CE}=1500V			1.0	mA
Collector Cutoff Current	I_{CBO}	V_{CB}=800V,I_E=0			10	uA
Collector Sustain Voltage	$V_{CEO(sus)}$	I_C=100mA,I_B=0	800			V
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V,I_C=0			1	mA
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=5A,I_B=1.2A			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=5A,I_B=1.2A			1.5	V
DC Current Gain	$h_{FE(1)}$	V_{CE}=5V,I_C=1.0A	8			
	$h_{FE(2)}$	V_{CE}=5V,I_C=5A	4		6	
Diode Forward Voltage	V_F	I_{EC}=6A			2.0	V
Storage Time	t_{stg}	I_C=5A,I_{B1}=1A,I_{B2}=-2A			3.0	us
Fall Time	t_f	I_C=5A,I_{B1}=1A,I_{B2}=-2A			0.3	us

Switching Time Test Circuit



Case Outline 2039
(unit:mm)



E: Emitter
C: Collector
B: Base
SANYO:TO3PML

Specifications and information herein are subject to change without notice.

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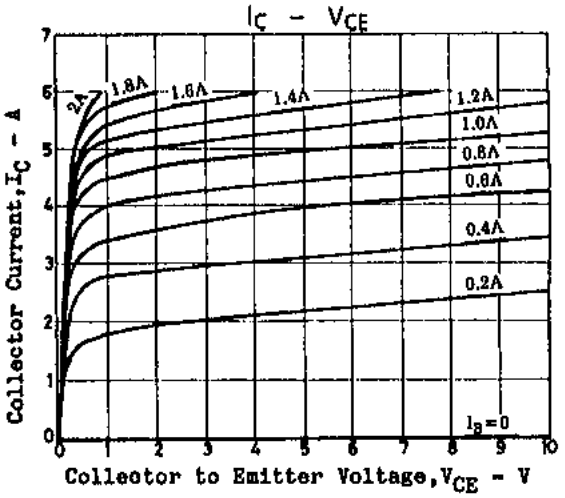
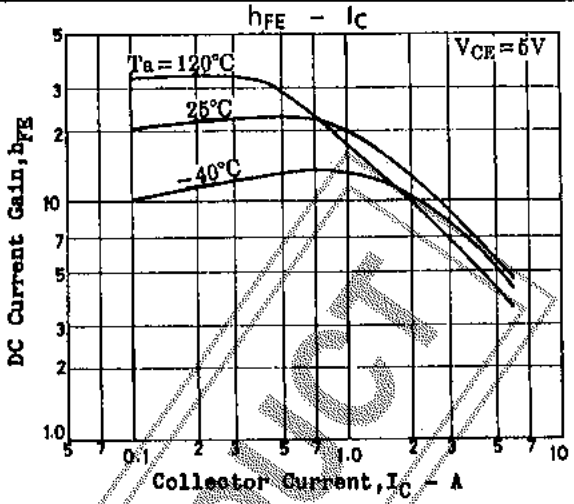
Natsume Bldg., 18-6, 2-chome, Yushima, Bunkyo-ku, TOKYO 113 JAPAN

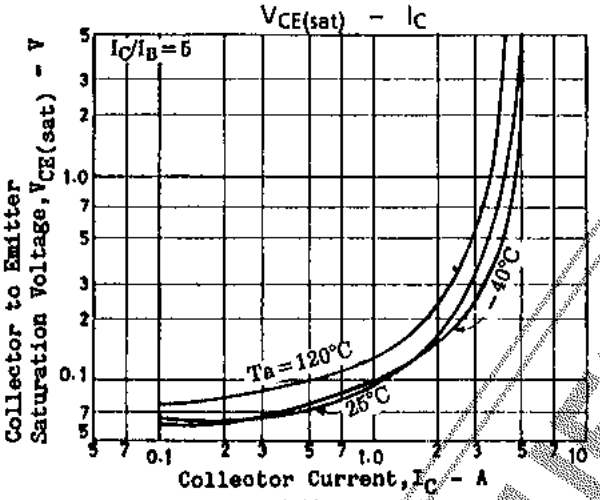
I_C – V_{CE}



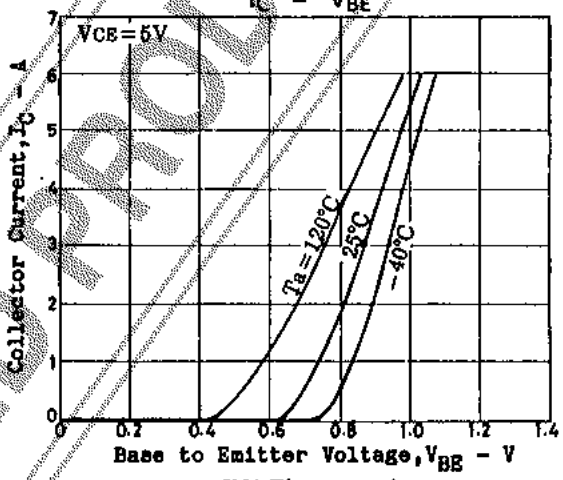
h_{FE} – I_C



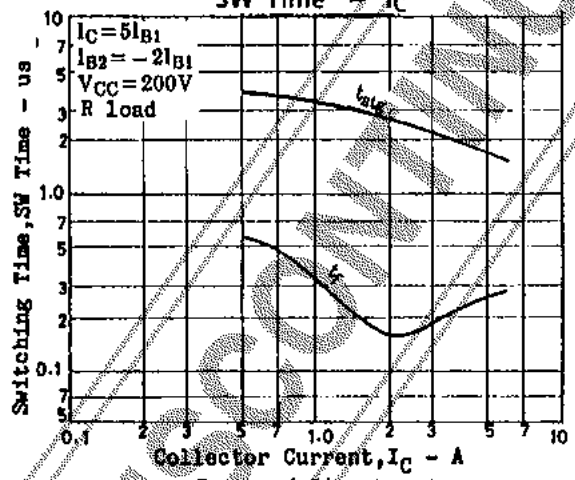
$V_{CE(sat)}$ – I_C



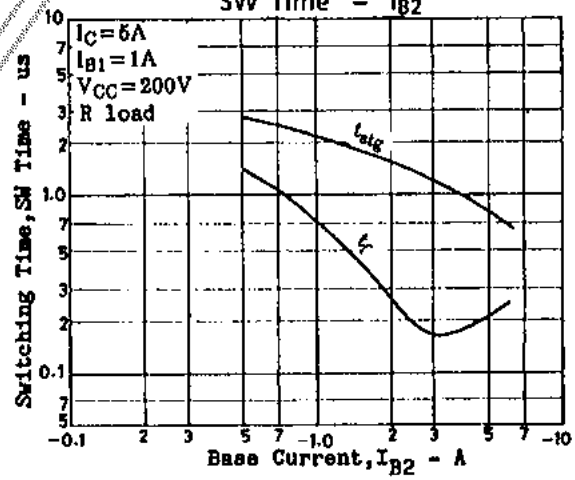
I_C – V_{BE}



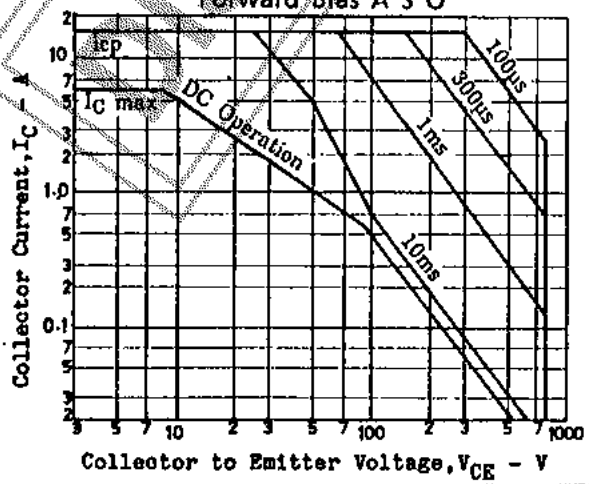
SW Time – I_C



SW Time – I_{B2}



Forward Bias A S O



Reverse Bias A S O