



No.3792

**2SC4437**

NPN Triple Diffused Planar Silicon Transistor

Ultrahigh-Definition Color Display  
Horizontal Deflection Output Applications

**Features**

- High speed ( $t_f = 0.3\text{ns}$  max).
- High breakdown voltage ( $V_{CBO} = 1500\text{V}$ ).
- High reliability (Adoption of HVP process).
- Adoption of MBIT process.

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

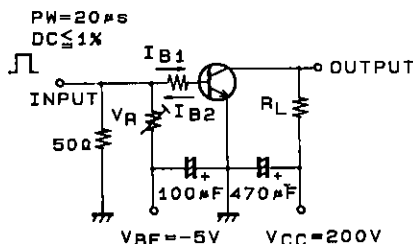
			unit
Collector-to-Base Voltage	$V_{CBO}$	1500	V
Collector-to-Emitter Voltage	$V_{CEO}$	800	V
Emitter-to-Base Voltage	$V_{EBO}$	7	V
Collector Current	$I_C$	5	A
Collector Current (Pulse)	$I_{CP}$	16	A
Collector Dissipation	$P_C$	3	W
		50	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

$T_c = 25^\circ\text{C}$

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

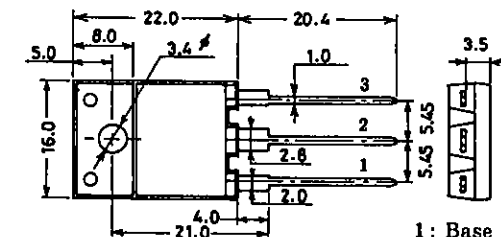
			min	typ	max	unit
Collector Cutoff Current	$I_{CES}$	$V_{CE} = 1500\text{V}$			1.0	mA
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 800\text{V}, I_E = 0$			10	$\mu\text{A}$
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}, I_B = 0$	800			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 4\text{V}, I_C = 0$			1	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 4\text{A}, I_B = 1\text{A}$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 4\text{A}, I_B = 1\text{A}$			1.5	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	8			
	$h_{FE(2)}$	$V_{CE} = 5\text{V}, I_C = 4\text{A}$	4		6	
Storage Time	$t_{stg}$	$I_C = 4\text{A}, I_{B1} = 0.8\text{A}, I_{B2} = -1.6\text{A}$			3.0	$\mu\text{s}$
Fall Time	$t_f$	$I_C = 4\text{A}, I_{B1} = 0.8\text{A}, I_{B2} = -1.6\text{A}$			0.3	$\mu\text{s}$

**Switching Time Test Circuit**



**Package Dimensions 2039B**

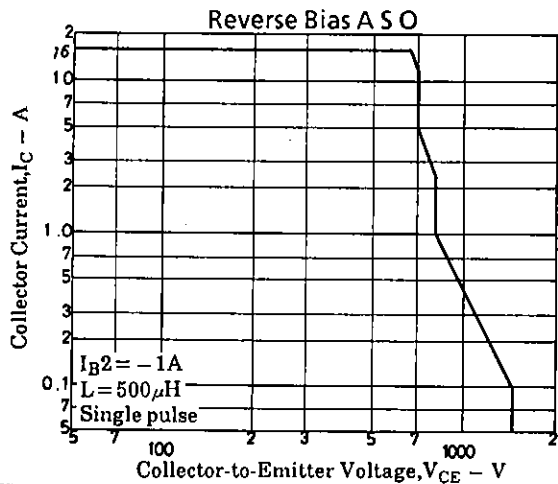
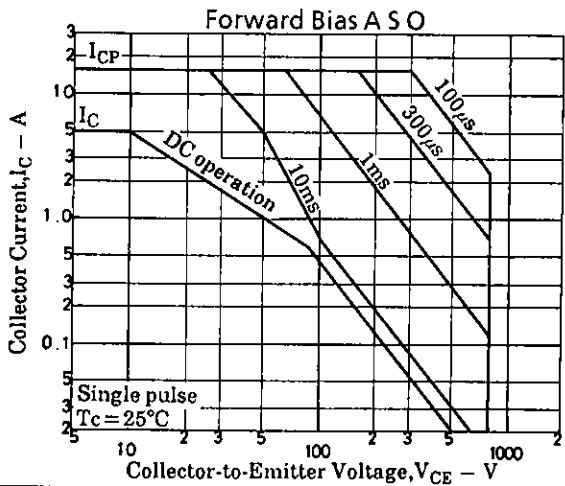
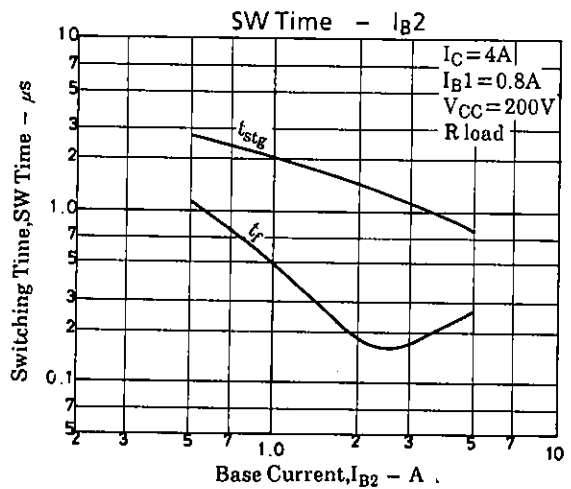
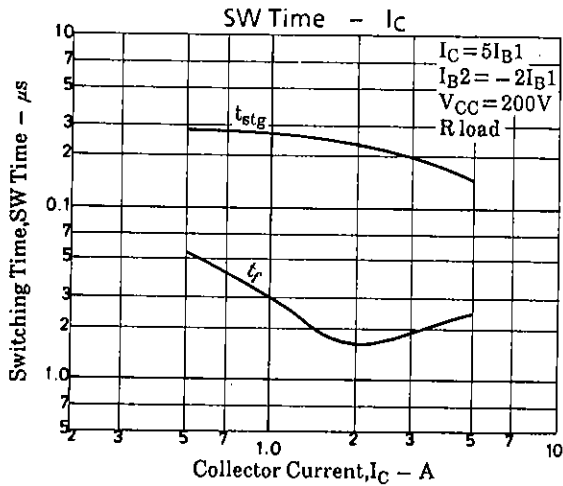
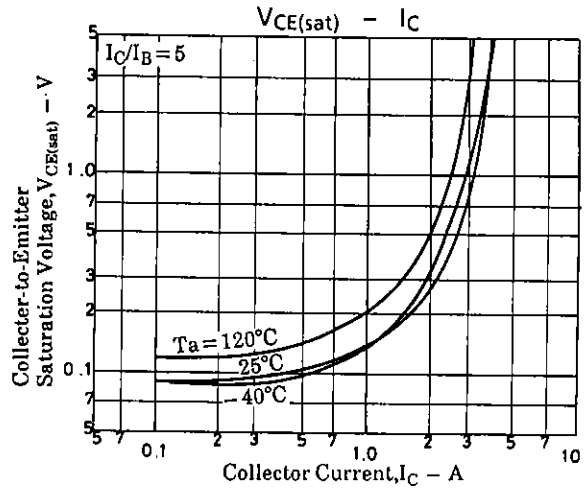
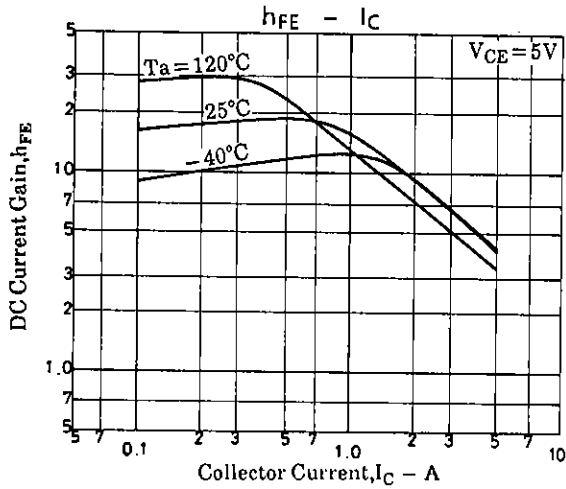
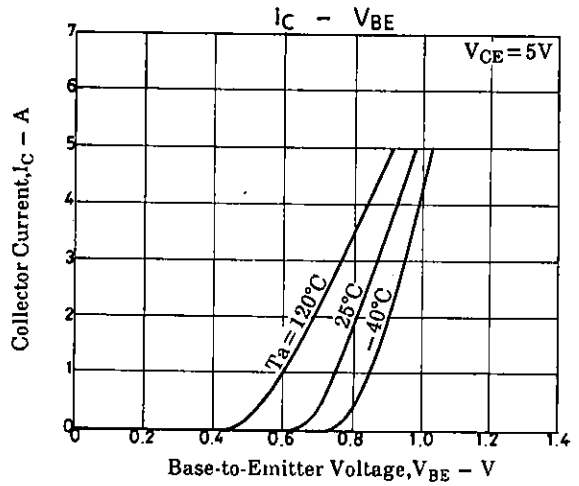
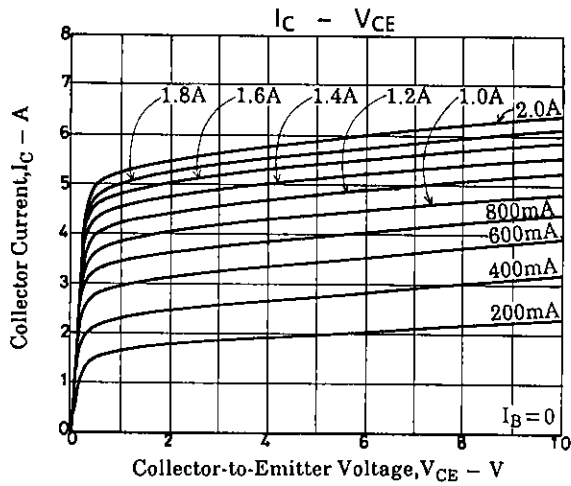
(unit: mm)

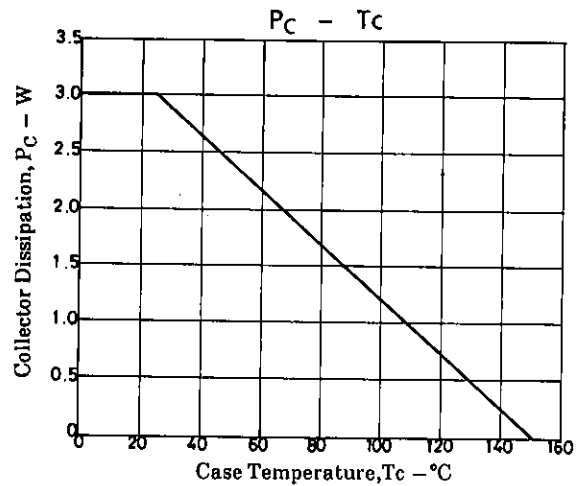
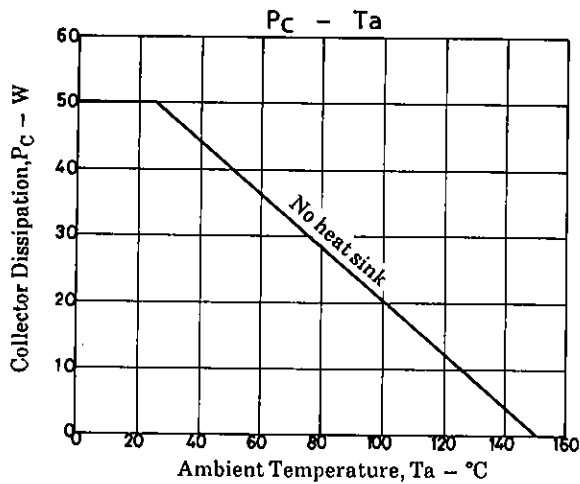


1: Base  
2: Collector  
3: Emitter

SANYO: TO3PML

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