

**SANYO**

No.3793

**2SC4440**

NPN Triple Diffused Planar Silicon Transistor  
 Very High-Definition Monochrome Display  
 Horizontal Deflection Output Applications

**Features**

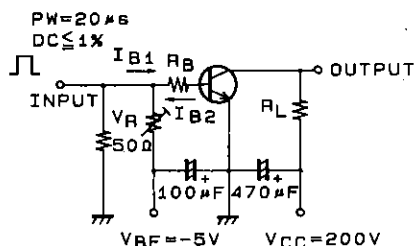
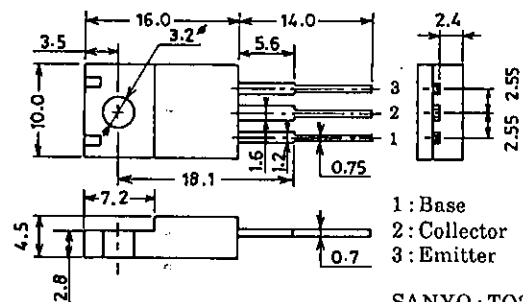
- High reliability (Adoption of HVP process).
- Fast switching speed.
- High blocking voltage.
- Wide ASO.
- Adoption of MBIT process.
- Micaless package facilitating easy mounting.

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

			unit
Collector-to-Base Voltage	$V_{CB0}$	600	V
Collector-to-Emitter Voltage	$V_{CEO}$	400	V
Emitter-to-Base Voltage	$V_{EBO}$	7	V
Collector Current	$I_C$	7	A
Collector Current (Pulse)	$I_{CP}$	$PW \leq 300\mu\text{s}$ , duty cycle $\leq 10\%$	14 A
Collector Dissipation	$P_C$	2.0	W
		$T_c = 25^\circ\text{C}$	30 W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

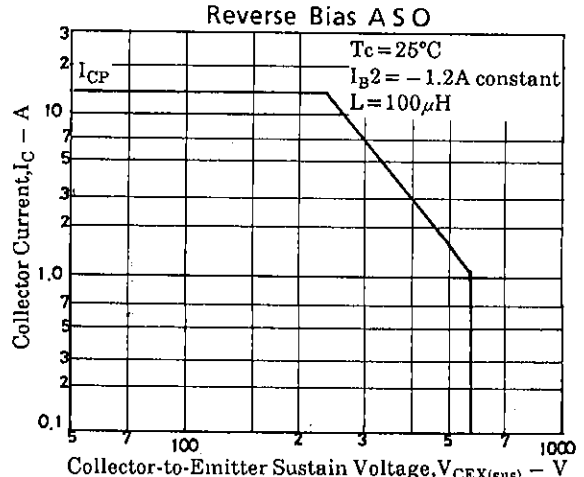
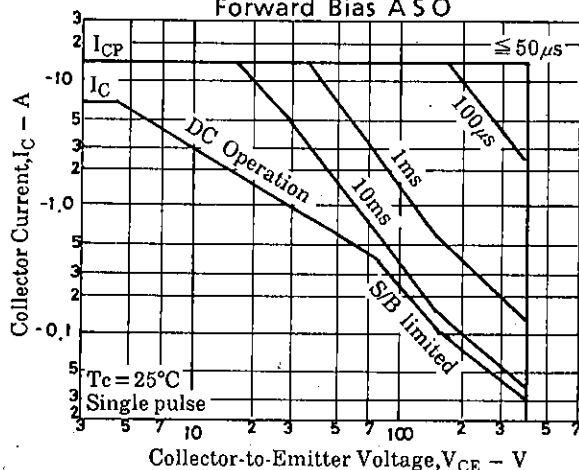
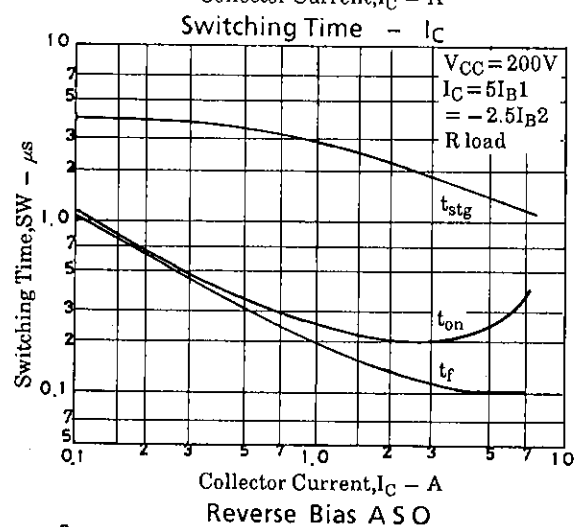
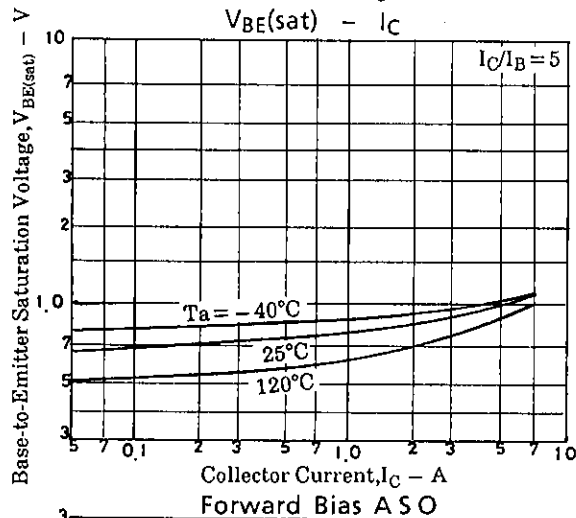
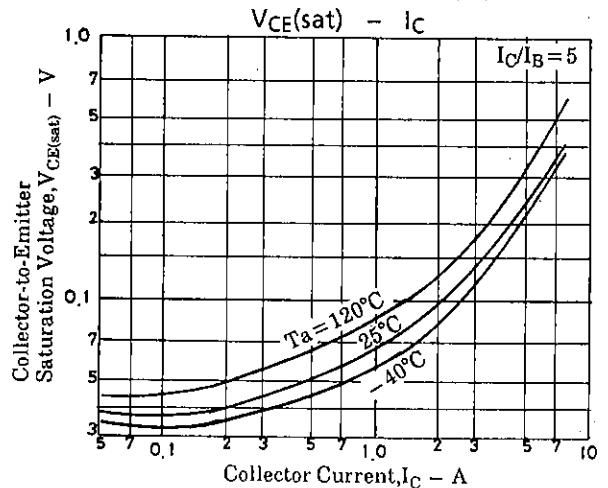
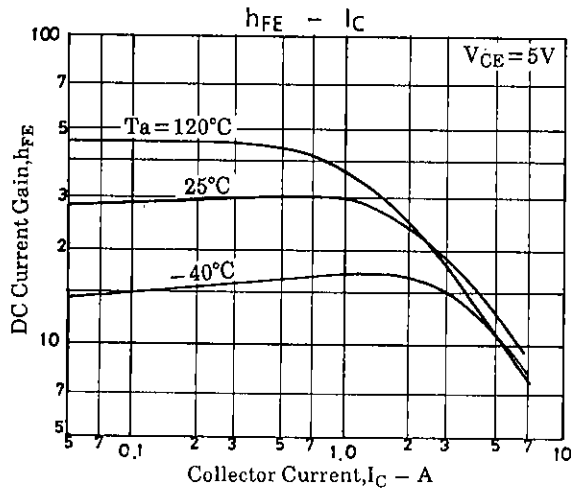
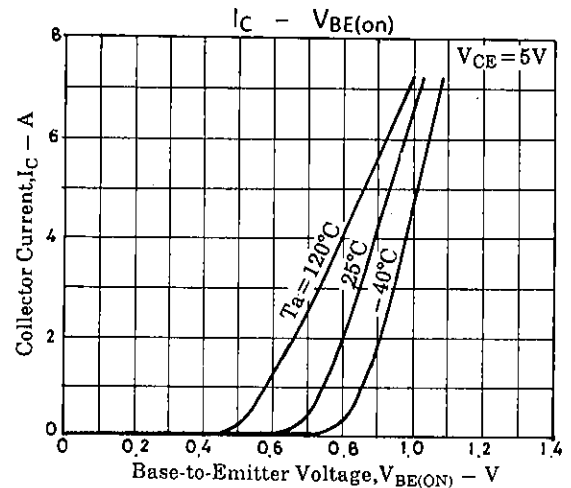
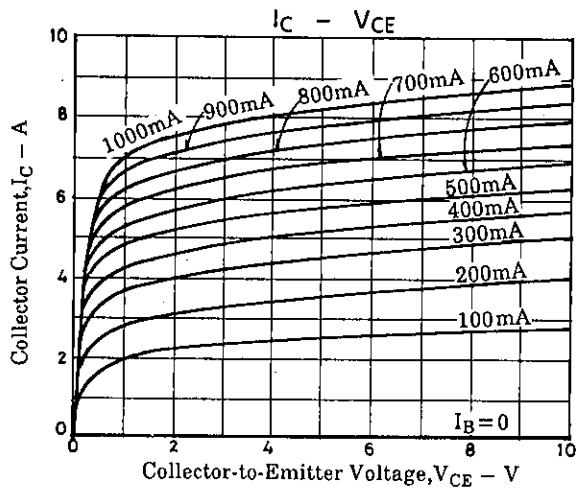
**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

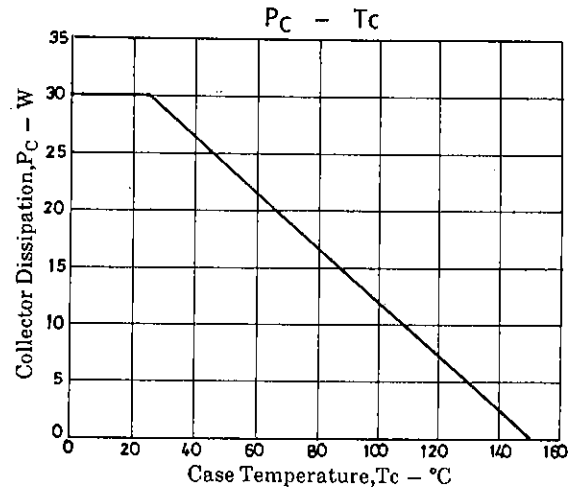
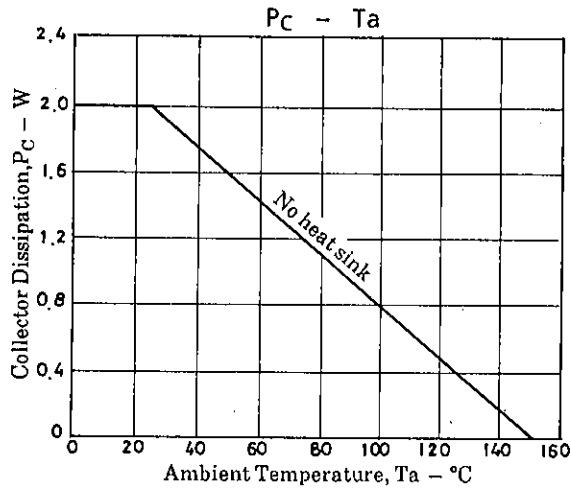
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 400\text{V}, I_E = 0$			10	$\mu\text{A}$
	$I_{CES}$	$V_{CE} = 600\text{V}$			0.5	mA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}, I_B = 0$	400			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$			1	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 4\text{A}, I_B = 0.8\text{A}$			0.8	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 4\text{A}, I_B = 0.8\text{A}$			1.5	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5\text{V}, I_C = 0.8\text{A}$	15			
	$h_{FE(2)}$	$V_{CE} = 5\text{V}, I_C = 4\text{A}$	10		20	
Gain-Bandwidth Product	$f_T$	$V_{CE} = 10\text{V}, I_C = 0.8\text{A}$		20		MHz
Storage Time	$t_{stg}$	$I_C = 5\text{A}, I_{B1} = 1\text{A}, I_{B2} = -2\text{A}$			3.0	$\mu\text{s}$
Fall Time	$t_f$	$R_L = 40\Omega, V_{CC} = 200\text{V}$			0.2	$\mu\text{s}$

**Switching Time Test Circuit****Package Dimensions 2041A**  
(unit : mm)

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