

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

- High speed ($t_f = 100\text{ns}$ typ).
- High reliability (HVP process).
- High breakdown voltage ($V_{CBO} = 1600\text{V}$).
- Adoption of MBIT process.
- On-chip damper diode.

Collector-to-Base Voltage	V_{CBO}	1600	V
Collector-to-Emitter Voltage	V_{CEO}	800	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	7	A
Collector Current (Pulse)	I_{CP}	16	A
Collector Dissipation	P_C	3.0	W
	$T_c = 25^\circ\text{C}$	60	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CE} = 800V, I_E = 0$			10	μA
Collector Cutoff Current	I_{CES}	$V_{CE} = 1600V, R_{BE} = 0$			1.0	mA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100mA, I_B = 0$	800			V
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V, I_C = 0$	40		130	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 5A, I_B = 1.25A$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 5A, I_B = 1.25A$			1.5	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5V, I_C = 1A$	10		20	
	$h_{FE(2)}$	$V_{CE} = 5V, I_C = 5A$	4		7	
Storage Time	t_{stg}	$I_C = 4A, I_{B1} = 0.7A, I_{B2} = -2.0A$			2.0	μs
Fall Time	t_f	$I_C = 4A, I_{B1} = 0.7A, I_{B2} = -2.0A$		0.1	0.2	μs

$PW=20\mu s$
 $DC\leq 1\%$

INPUT $\rightarrow$ 50Ω $\rightarrow$ V_R $\rightarrow$ $100\mu F$ $\rightarrow$ $470\mu F$ $\rightarrow$ 50Ω $\rightarrow$ OUTPUT

$V_{BE}=-5V$ $V_{CC}=200V$

Technical drawing of a 100W/250V filament lamp, showing dimensions in mm.

Front View Dimensions:

- Overall width: 22.0
- Distance from left edge to center of base: 8.0
- Distance from center of base to right edge: 20.4
- Distance from left edge to center of base (alternative): 5.0
- Distance from center of base to right edge (alternative): 3.4
- Overall height: 16.0
- Distance from bottom edge to center of base: 4.0
- Distance from center of base to right edge (alternative): 21.0

Side View Dimensions:

- Overall height: 5.45
- Distance from bottom edge to center of base: 2.0
- Distance from center of base to right edge: 2.8
- Distance from right edge to center of base: 1.0
- Distance from right edge to center of base (alternative): 3

Detail View Dimensions:

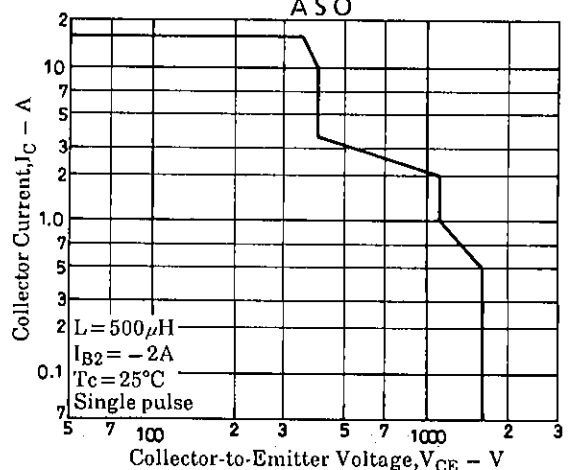
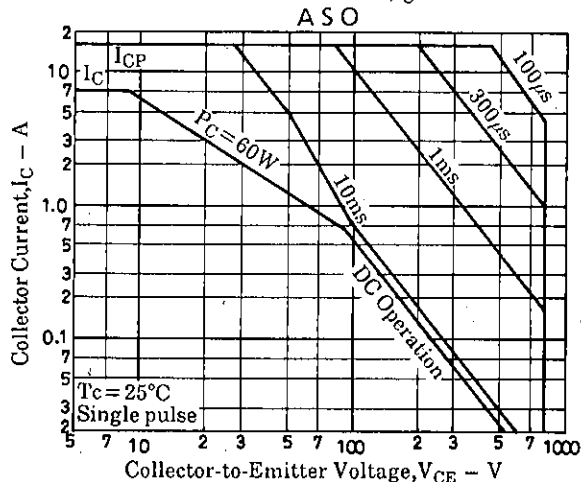
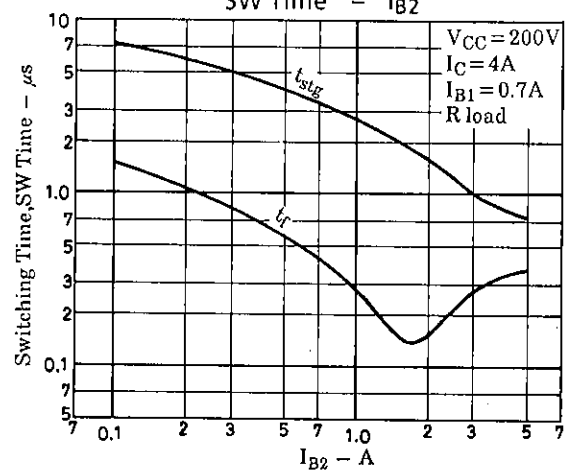
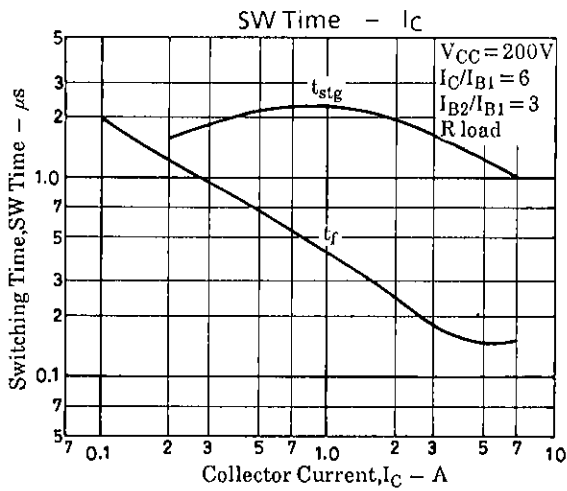
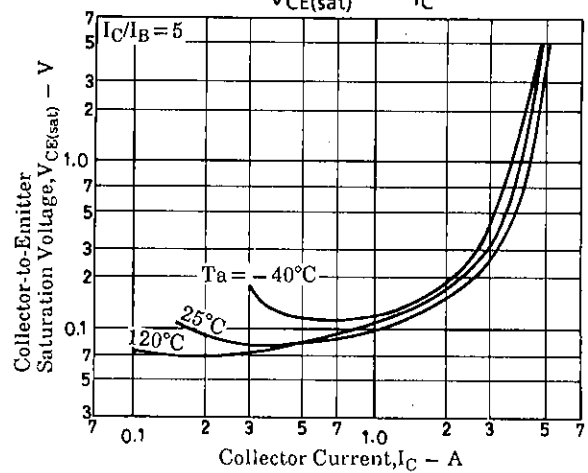
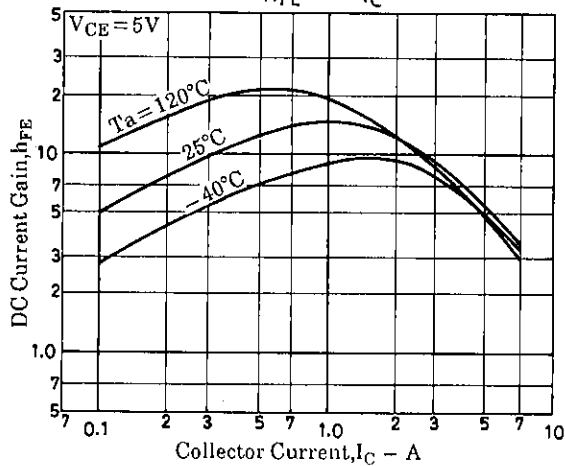
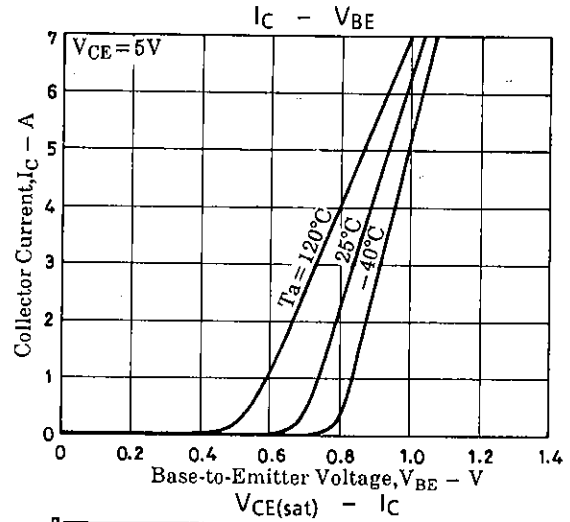
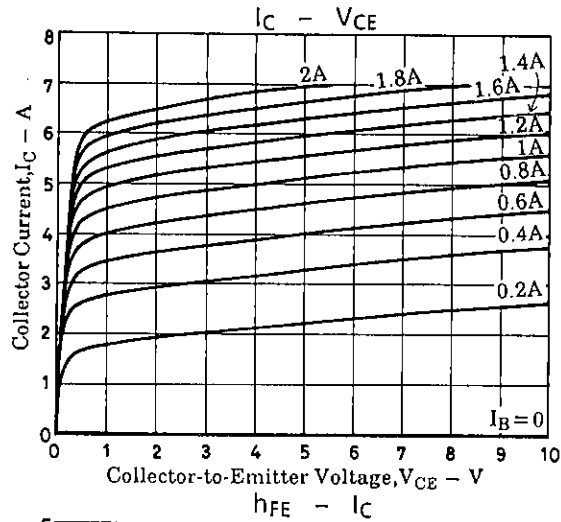
- Overall height: 5.6
- Distance from bottom edge to center of base: 3.1
- Distance from center of base to right edge: 0.6

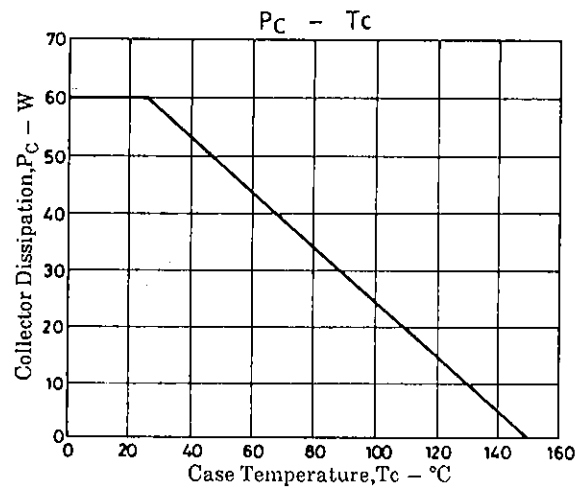
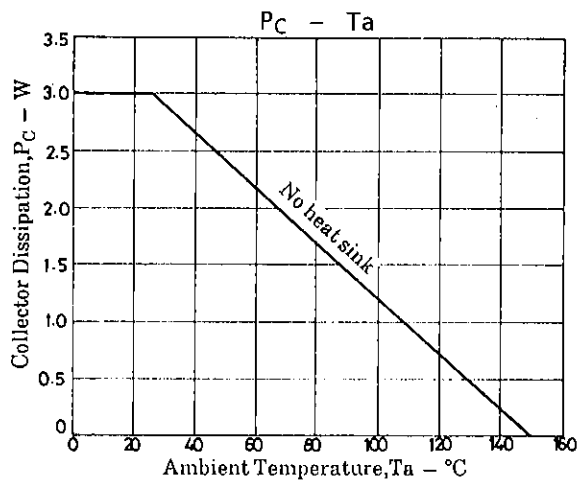
Legend:

- 1 : Base
- 2 : Coller
- 3 : Emit

SANYO : TO-3PML

91294MT (KOTO) BX-0709 No.4779-1/3





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