



No.2427A

2SD1880
NPN Triple Diffused Planar Silicon Transistor
Color TV Horizontal Deflection
Output Applications

Color TV Horizontal Deflection Output Applications

Applications

- Color TV horizontal deflection output.
- Color display horizontal deflection output.

Features

- High speed ($t_f = 100\text{ns}$).
- High breakdown voltage ($V_{CBO} = 1500\text{V}$).
- High reliability (Adoption of HVP process).
- On-chip damper diode.

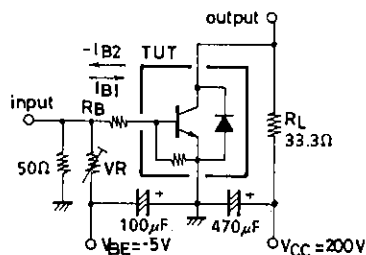
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Collector-to-Base Voltage	V_{CBO}	1500	V
Collector-to-Emitter Voltage	V_{CEO}	800	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	8	A
Collector Current (Pulse)	I_{CP}	30	A
Collector Dissipation	P_C	70	W
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^{\circ}\text{C}$

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

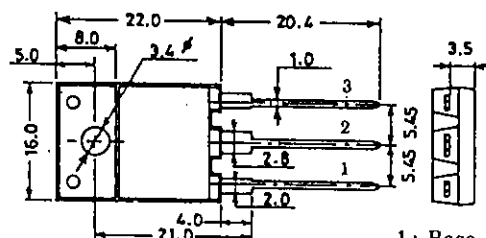
Parameter	Symbol	Test Conditions	Unit
Collector Cutoff Current	I_{CES}	$V_{CE} = 1500V$	mA
	I_{CBO}	$V_{CB} = 800V$	μA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100mA, I_B = 0$	V
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V$	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 6A, I_B = 1.2A$	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 6A, I_B = 1.2A$	V
DC Current Gain	h_{FE1}	$V_{CE} = 5V, I_C = 1A$	
	h_{FE2}	$V_{CE} = 5V, I_C = 6A$	
Diode Forward Voltage	V_F	$I_{EC} = 8A$	V
Fall Time	t_f	$I_C = 6A, I_{B2} = 1.2A, I_{B2} = -2.4A$	μs

Switching Time Test Circuit

$$PW = 20 \mu s, \text{ duty} \leq 1\%$$


Package Dimensions 2039B

(unit: mm)



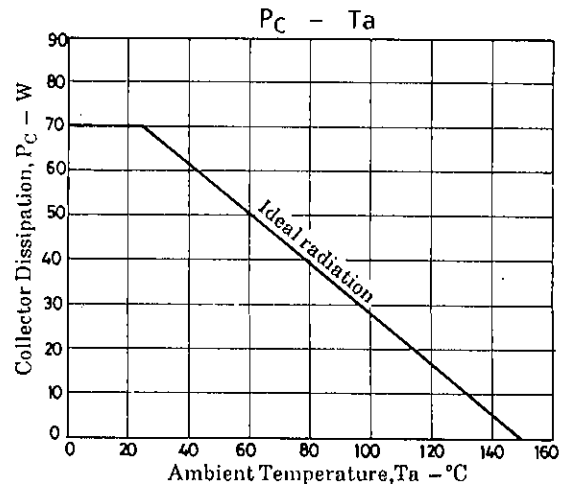
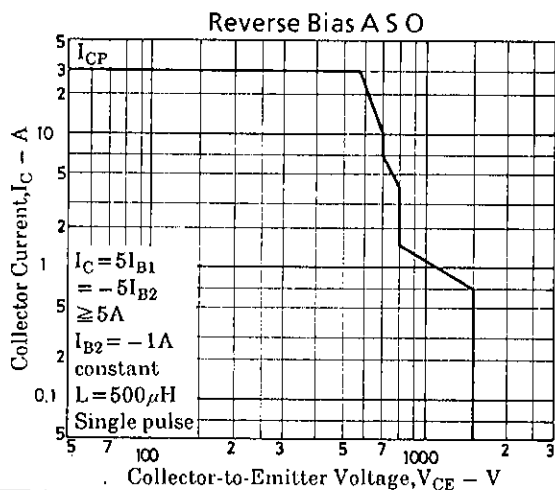
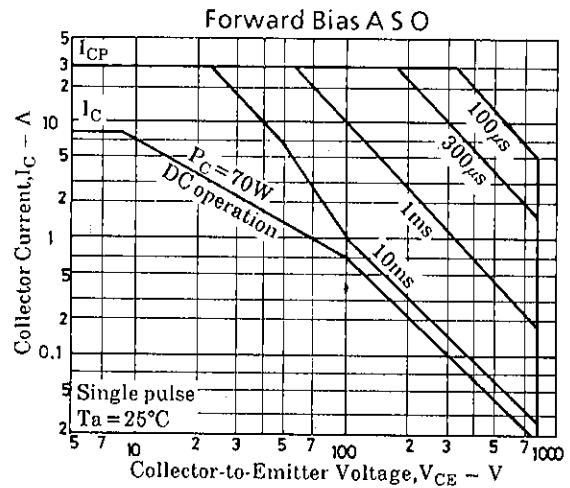
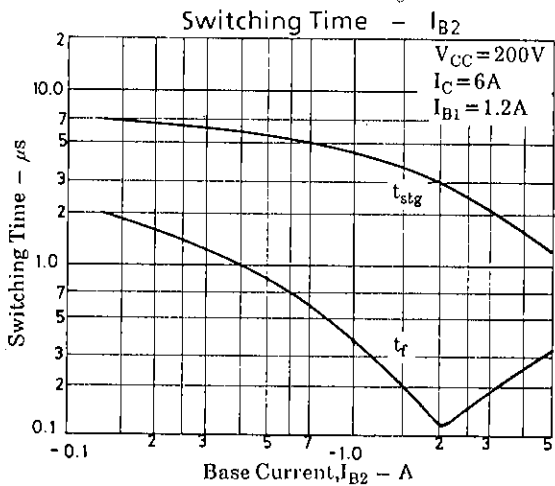
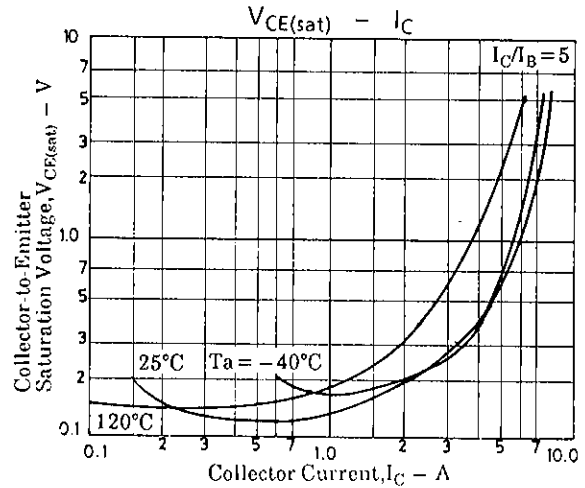
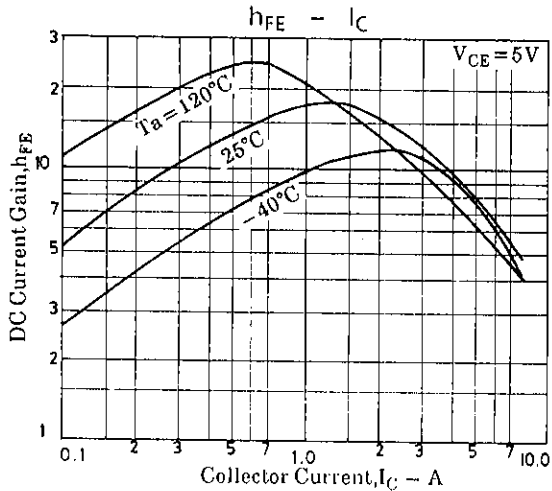
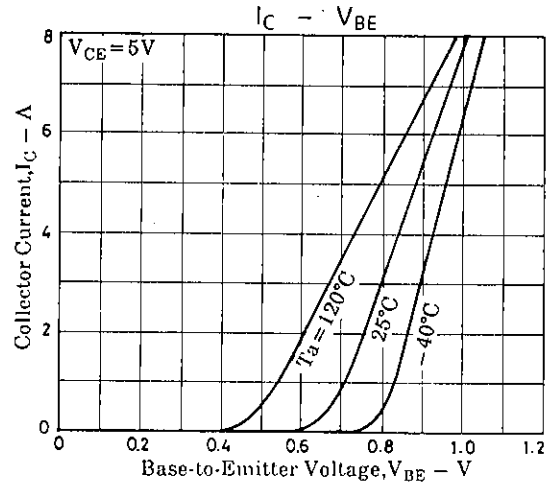
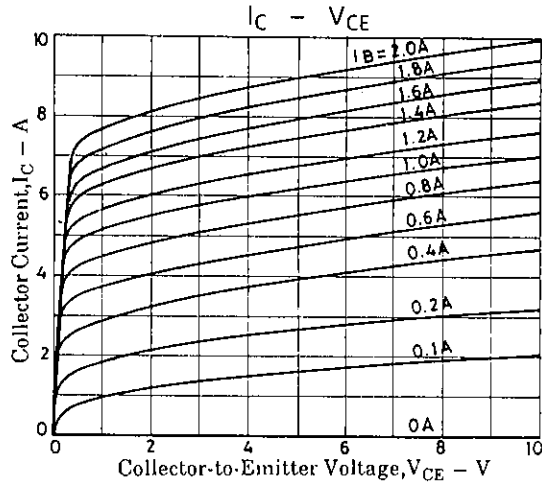
1: Base
2: Collector
3: Emitter

SANYO:TO3PML

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