

SANYO	No.2428A	2SD1881
		NPN Triple Diffused Planar Type Silicon Transistor

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

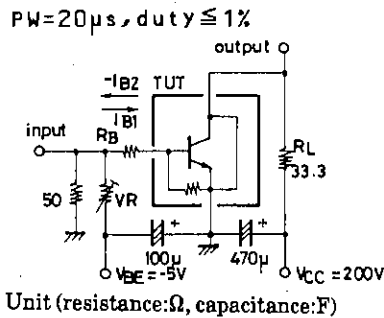
Collector-to-Base Voltage	V_{CBO}	1500	V	unit
Collector-to-Emitter Voltage	V_{CEO}	800	V	
Emitter-to-Base Voltage	V_{EBO}	6	V	
Collector Current	I_C	10	A	
Peak Collector Current	i_{cp}	30	A	
Collector Dissipation	P_C	70	W	
Junction Temperature	T_j	150	$^\circ\text{C}$	
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

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

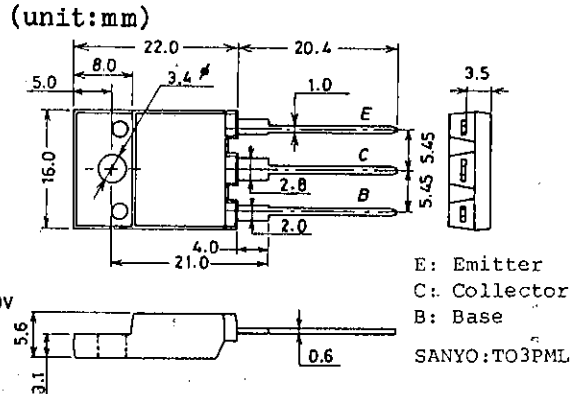
Electrical Characteristics at $T_a=25^\circ\text{C}$

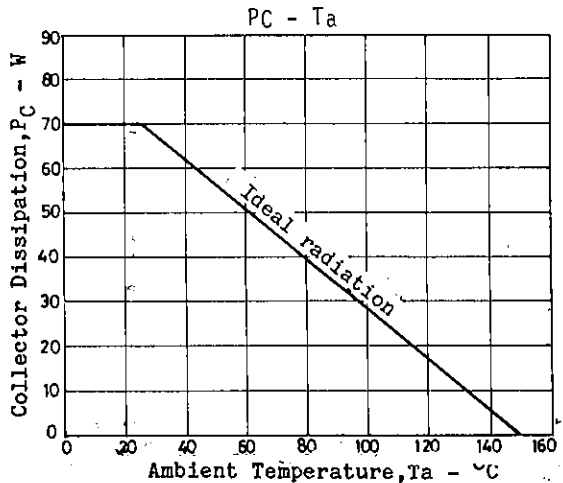
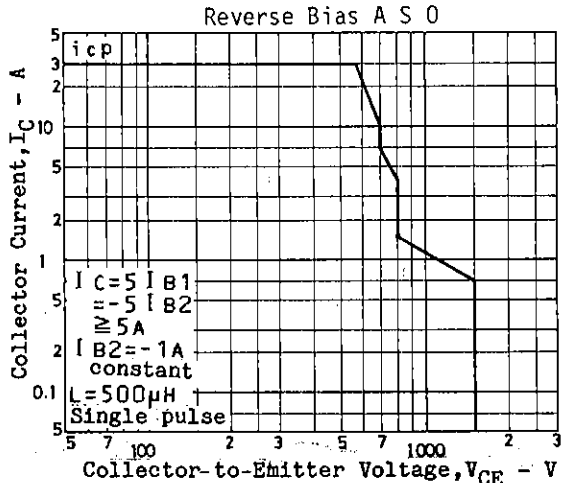
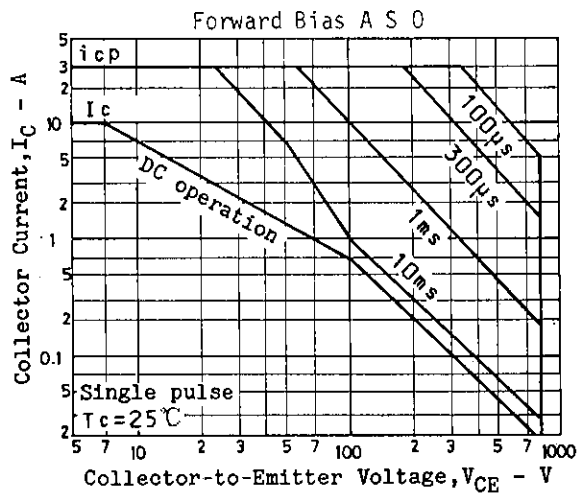
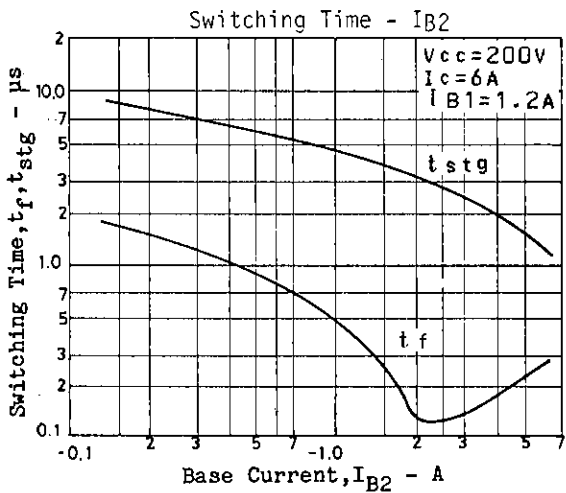
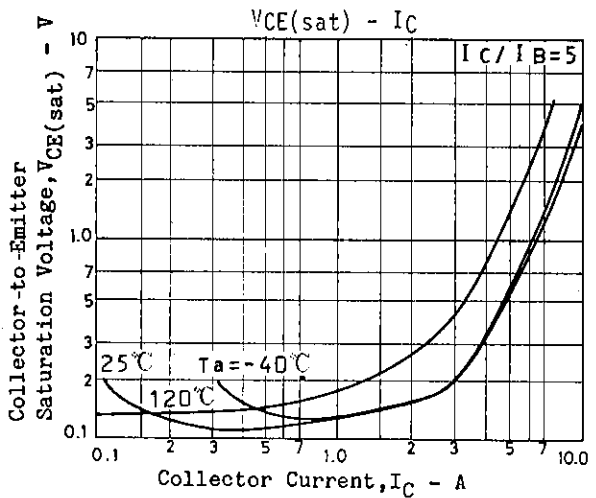
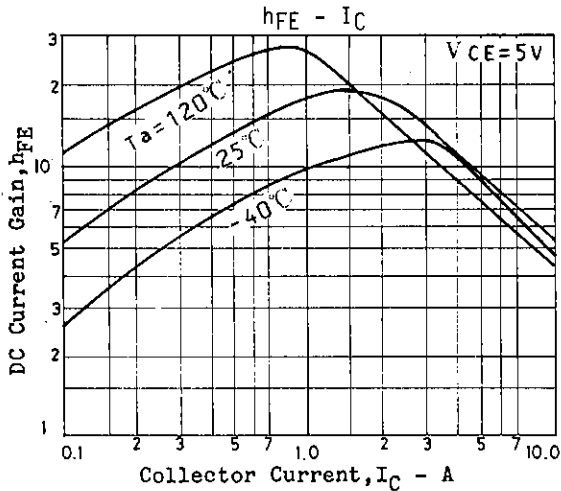
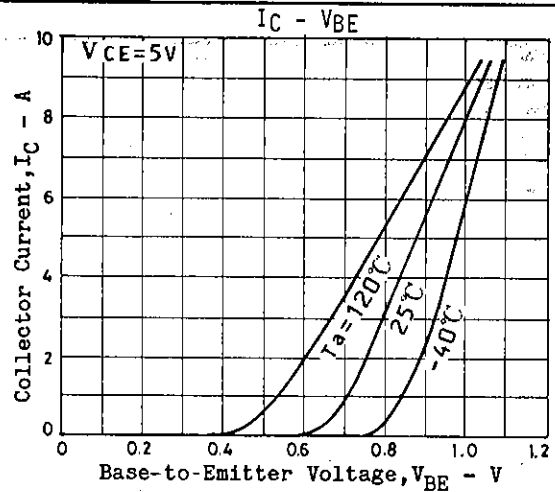
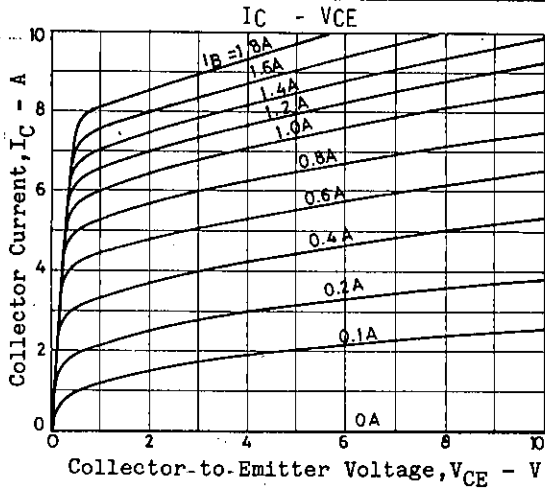
			min	typ	max		unit
Collector Cutoff Current	I_{CES}	$V_{CE}=1500\text{V}$			1.0		mA
	I_{CBO}	$V_{CB}=800\text{V}$			10		μA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C=100\text{mA}, I_B=0$	800				V
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4\text{V}$	40		130		mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=8\text{A}, I_B=1.6\text{A}$			5		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=8\text{A}, I_B=1.6\text{A}$			1.5		V
DC Current Gain	h_{FE1}	$V_{CE}=5\text{V}, I_C=1\text{A}$	8				
	h_{FE2}	$V_{CE}=5\text{V}, I_C=8\text{A}$	5		10		
Diode Forward Voltage	V_F	$I_{EC}=10\text{A}$			2.0		V
Fall Time	t_f	$I_C=6\text{A}, I_{B1}=1.2\text{A}, I_{B2}=-2.4\text{A}$		0.1	0.3		μs

Switching Time Test Circuit



Package Dimensions 2039





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