Ordering number:EN2428A

NPN Triple Diffused Planar Silicon Transistor

2SD1881

Color TV Horizontal Deflection Output Applications

Applications

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

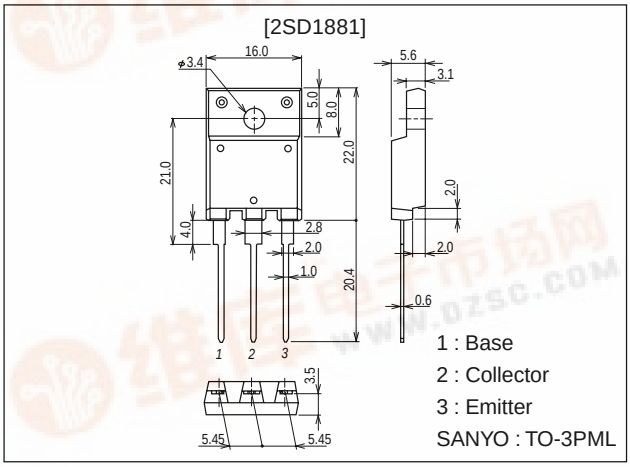
Features

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

Package Dimensions

unit:mm

2039D



Specifications

Absolute Maximum Ratings at Ta = 25˚C

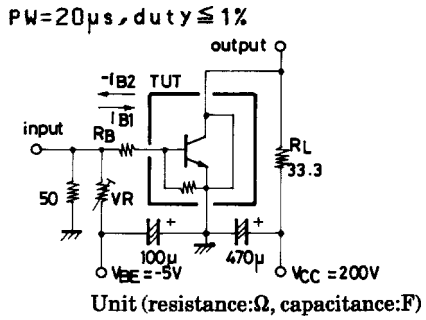
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		1500	V
Collector-to-Emitter Voltage	V_{CEO}		800	V
Emitter-to-Base Voltage	V_{EBO}		6	V
Collector Current	I_C		10	A
Collector Current (Pulse)	I_{CP}		30	A
Collector Dissipation	P_C	Tc=25˚C	70	W
Junction Temperature	Tj		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CES}	V_{CE}=1500V			1.0	mA
	I_{CBO}	V_{CB}=800V			10	μA
Collector-to-Emitter Sustain Voltage	$V_{CEO(sus)}$	I_C=100mA, I_B=0	800			V
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V	40		130	mA
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=8A, I_B=1.6A			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=8A, I_B=1.6A			1.5	V
DC Current Gain	$h_{FE}1$	V_{CE}=5V, I_C=1A	8			
	$h_{FE}2$	V_{CE}=5V, I_C=8A	5		10	
Diode Forward Voltage	V_F	I_{EC}=10A			2.0	V
Fall Time	t_f	I_C=6A, I_{B1}=1.2A, I_{B2}=–2.4A		0.1	0.3	μs

SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Switching Time Test Circuit



Unit (resistance:Ω, capacitance:F)