NPN Triple Diffused Planar Silicon Transistor



2SD2580

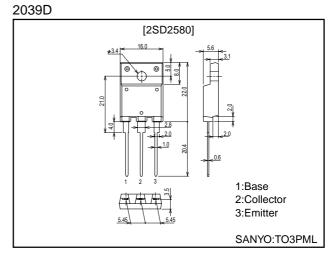
Color TV Horizontal Deflection Output Applications

Features

- \cdot High speed.
- · High breakdown voltage (V_{CBO} =1500V).
- · High reliability (Adoption of HVP process).
- · Adoption of MBIT process.
- · On-chip damper diode.

Package Dimensions

unit:mm



Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		1500	V
Collector-to-Emitter Voltage	VCEO		800	V
Emitter-to-Base Voltage	VEBO		6	V
Collector Current	IC		10	A
Collector Current (pulse)	ICP		30	A
Collector Dissipation	PC		3.0	W
		Tc=25°C	70	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

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

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =800V, I _E =0			10	μA
Collector Cutoff Current	ICES	V _{CE} =1500V, 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

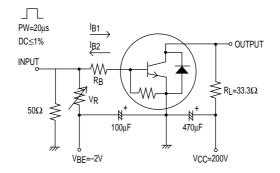
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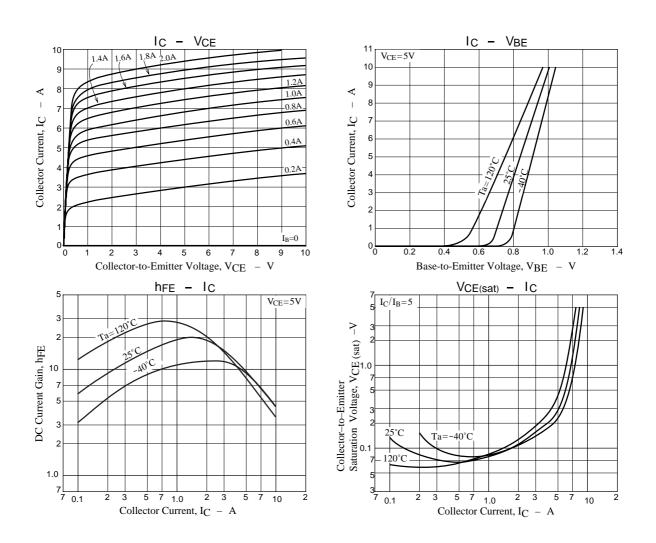
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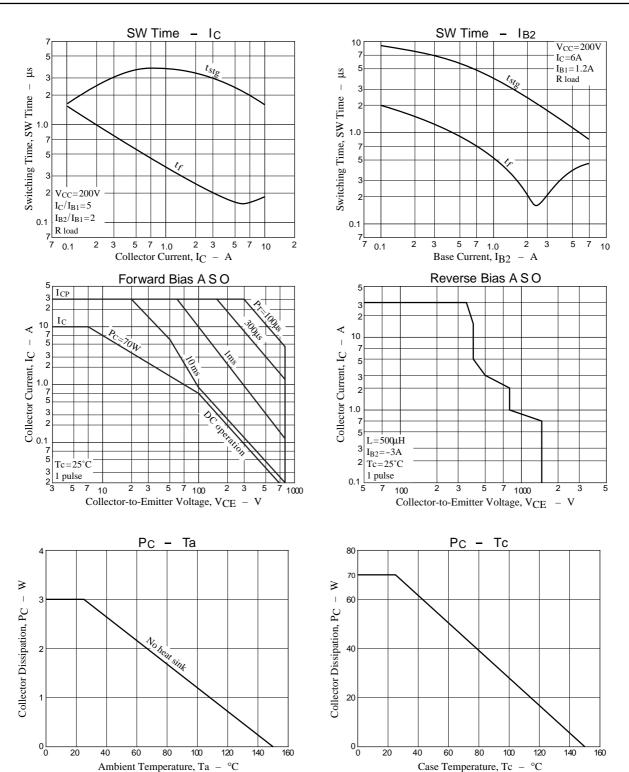
SANYO Electric Co., Ltd. Semiconductor Bussiness Headquaters TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN Continued from preceiding page.

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	Unit
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	15		30	
	h _{FE} 2	V _{CE} =5V, I _C =8A	5		8	
Fall Time	t _f	I _C =6A, I _{B1} =1.2A, I _{B2} =-2.4A			0.3	μs

Switching Time Test Circuit







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