NPN Triple Diffused Planar Silicon Transistor



TT2170LS

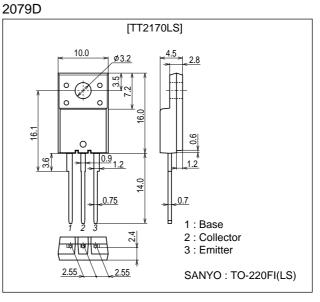
Color TV Horizontal Deflection Output Applications

Features

- High speed.
- High breakdown voltage(VCBO=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°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		5	V
Collector Current	IC		5	А
Collector Current (Pulse)	ICP		12	А
Collector Dissipation			2.0	W
	PC	Tc=25°C	25	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	Unit
Collector Cutoff Current	ICBO	VCB=800V, IE=0			10	μΑ
Collector Cutoff Current	ICES	V _{CE} =1500V, R _{BE} =0			1.0	mA
Collector Sustain Voltage	VCEO(sus)	IC=100mA, IB=0	800			V
Emitter Cutoff Current	IEBO	VBE=4V, IC=0	40		130	mA

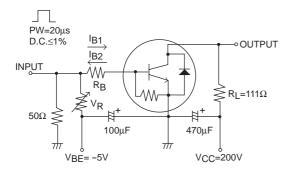
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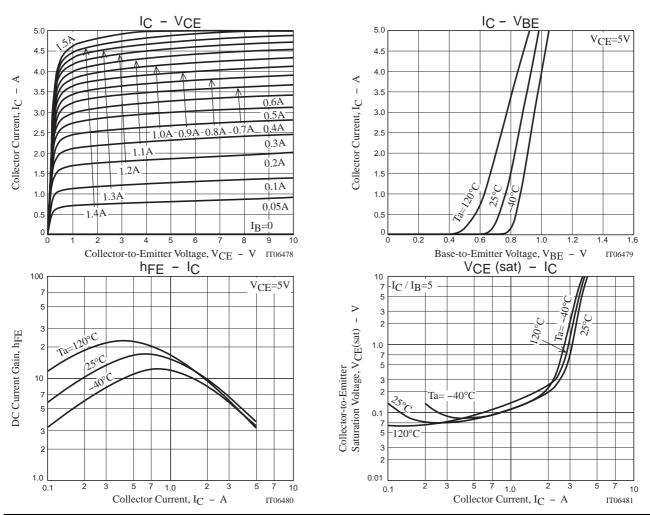
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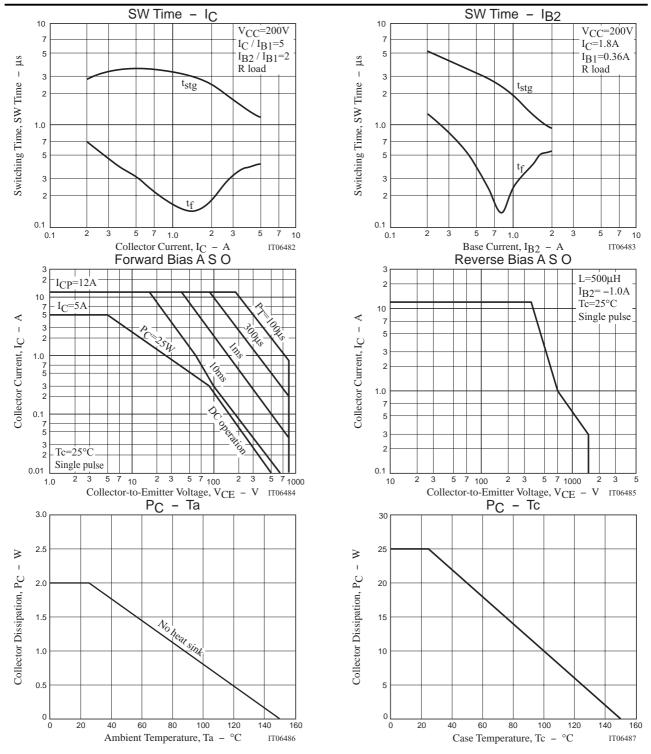
SANYO Electric Co., Ltd. Semiconductor Company TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN Continued from preceding page.

Parameter	Symbol	Conditions		Ratings		
			min	typ	max	Unit
Collector-to-Emitter Saturation Voltage	V _{CE} (sat)	IC=2.7A, IB=0.54A			3	V
Base-to-Emitter Saturation Voltage	V _{BE} (sat)	IC=2.7A, IB=0.54A			1.5	V
DC Current Gain	hFE1	VCE=5V, IC=0.5A	10			
	hFE2	V _{CE} =5V, I _C =3A	5		8	
Diode Forward Voltage	VF	IEC=4A			2	V
Fall Time	tf	IC=1.8A, IB1=0.36A, IB2=-0.72A			0.3	μs

Switching Time Test Circuit







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