NPN Triple Diffused Planar Silicon Transistor



2SC5305LS

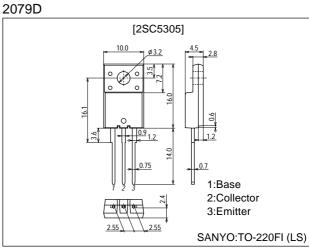
Inverter Lighting Applications

Features

- · High breakdown voltage (V_{CBO} =1200V).
- \cdot High reliability (Adoption of HVP process).
- \cdot Adoption of MBIT process.

Package Dimensions

unit:mm



Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		1200	V
Collector-to-Emitter Voltage	VCEO		600	V
Emitter-to-Base Voltage	VEBO		9	V
Collector Current	ΙC		6	A
Collector Current (pulse)	ICP		12	A
Collector Dissipation	D-		2	W
	PC	Tc=25°C	35	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta=25°C

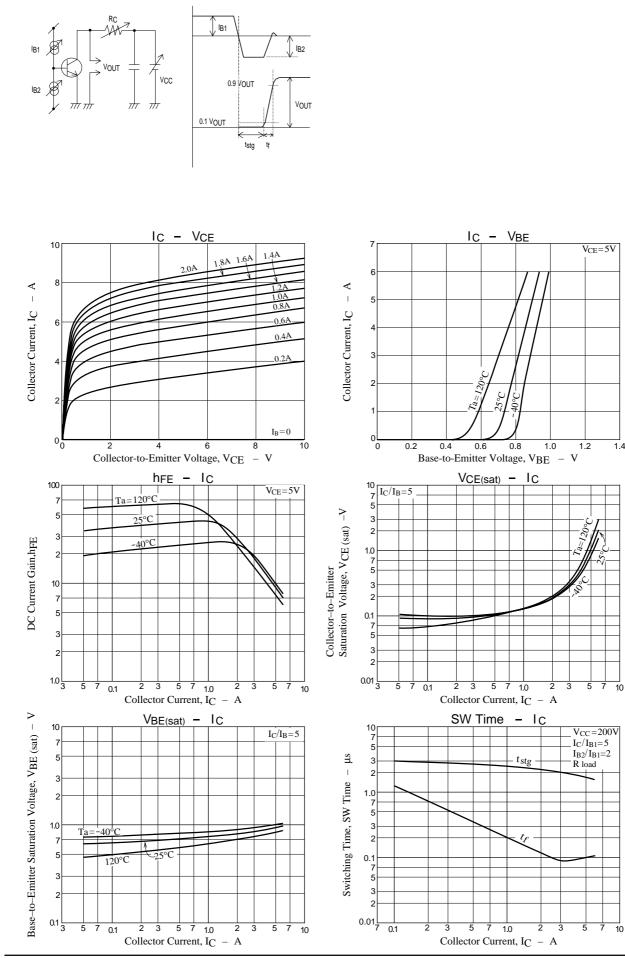
Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =600V, I _E =0			10	μΑ
Collector Cutoff Current	ICES	V _{CE} =1200V, R _{BE} =0			1.0	mA
Collector Saturation Voltage	V _{CEO(sus)}	I _C =100mA, I _B =0	600			V
Emitter Cutoff Current	IEBO	V _{EB} =9V, I _C =0			1.0	mA
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =3.0A, I _B =0.6A			1.0	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =3.0A, I _B =0.6A			1.5	V
DC Current Gain	h _{FE} 1	V _{CE} =5V, I _C =0.3A	30	40	50	
	h _{FE} 2	V _{CE} =5V, I _C =2.5A	10			
Storage Time	t _{stg}	I _C =3.5A, I _{B1} =0.6A, I _{B2} =-1.2A			2.5	μs
Fall Time	t _f	I _C =3.5A, I _{B1} =0.6A, I _{B2} =-1.2A			0.15	μs

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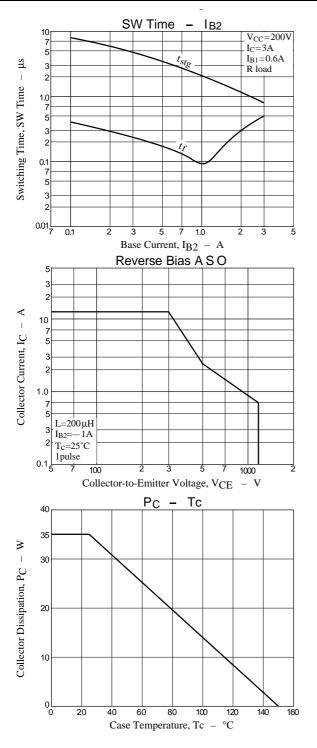
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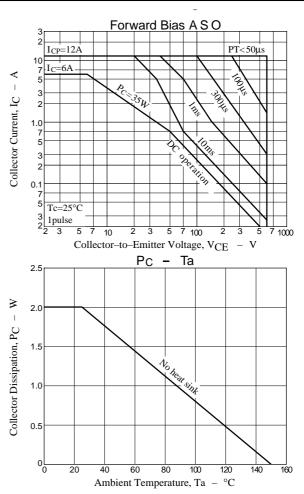
Switching Time Test Circuit



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