

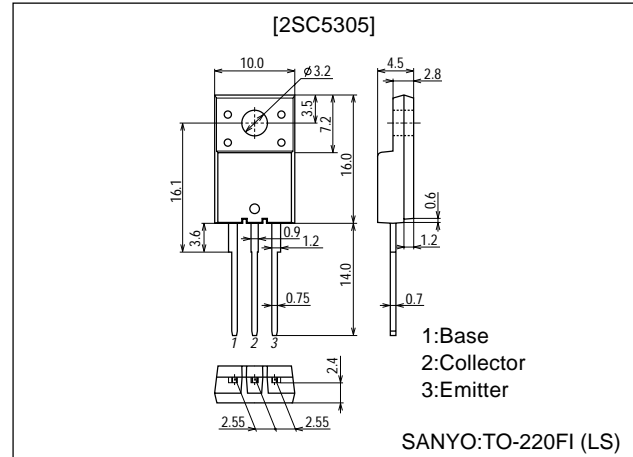
**2SC5305LS****Inverter Lighting Applications****Features**

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

**Package Dimensions**

unit:mm

2079D

**Specifications****Absolute Maximum Ratings** at  $T_a = 25^\circ C$ 

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CBO}$		1200	V
Collector-to-Emitter Voltage	$V_{CEO}$		600	V
Emitter-to-Base Voltage	$V_{EBO}$		9	V
Collector Current	$I_C$		6	A
Collector Current (pulse)	$I_{CP}$		12	A
Collector Dissipation	$P_C$		2	W
		$T_c=25^\circ C$	35	W
Junction Temperature	$T_j$		150	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ C$

**Electrical Characteristics** at  $T_a=25^\circ C$ 

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=600V, I_E=0$			10	$\mu A$
Collector Cutoff Current	$I_{CES}$	$V_{CE}=1200V, R_{BE}=0$			1.0	mA
Collector Saturation Voltage	$V_{CEO(sus)}$	$I_C=100mA, I_B=0$	600			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=9V, I_C=0$			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	$h_{FE1}$	$V_{CE}=5V, I_C=0.3A$	30	40	50	
	$h_{FE2}$	$V_{CE}=5V, I_C=2.5A$	10			
Storage Time	$t_{stg}$	$I_C=3.5A, I_{B1}=0.6A, I_{B2}=-1.2A$			2.5	$\mu s$
Fall Time	$t_f$	$I_C=3.5A, I_{B1}=0.6A, I_{B2}=-1.2A$			0.15	$\mu s$

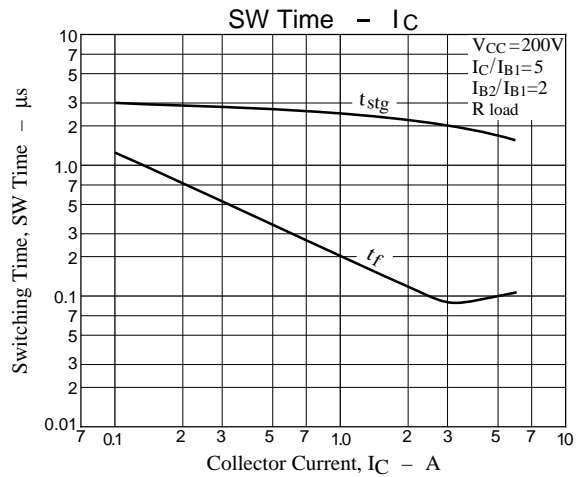
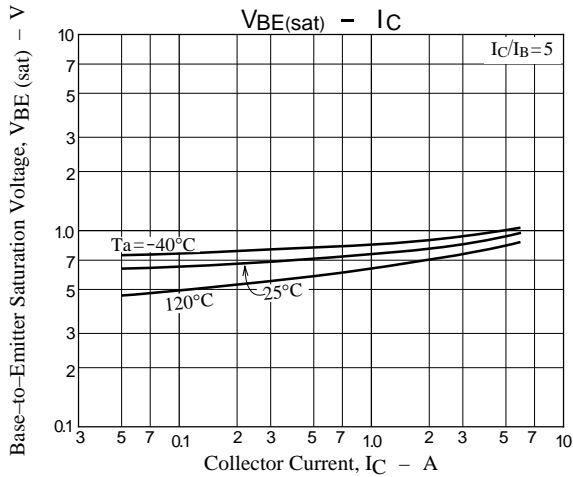
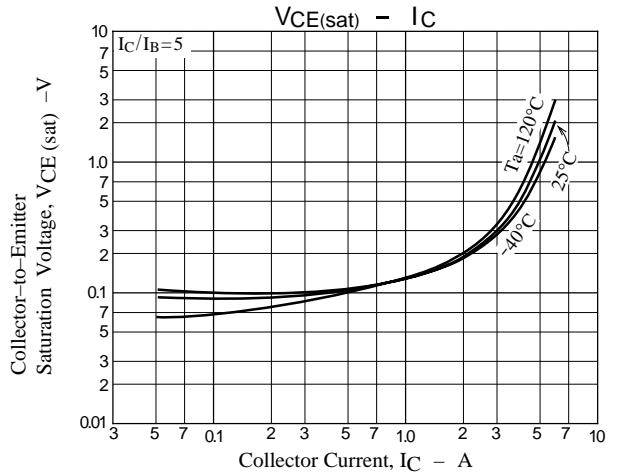
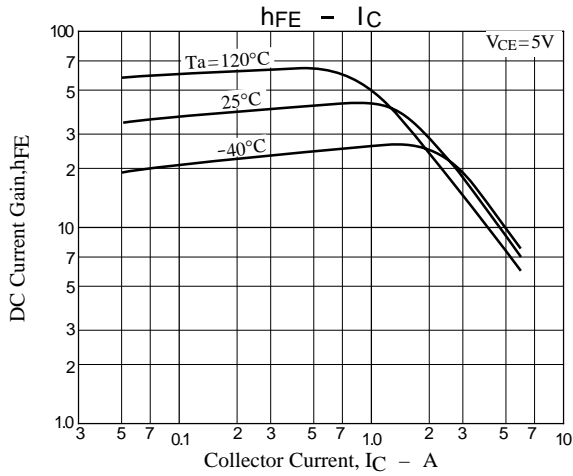
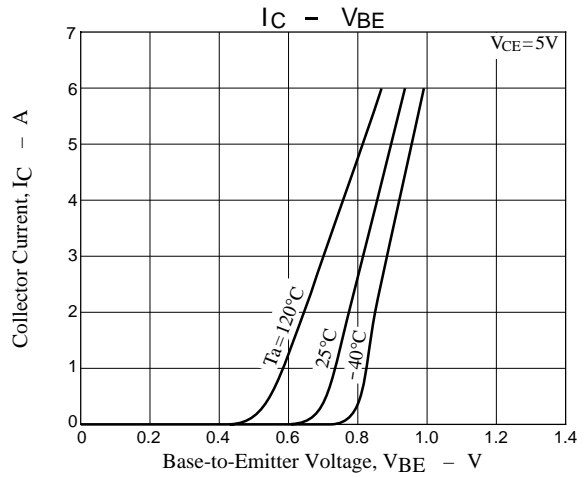
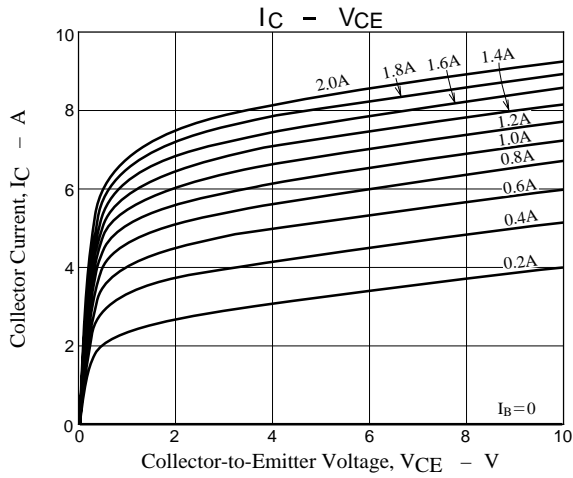
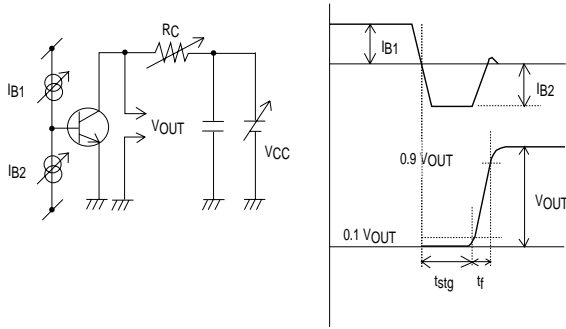
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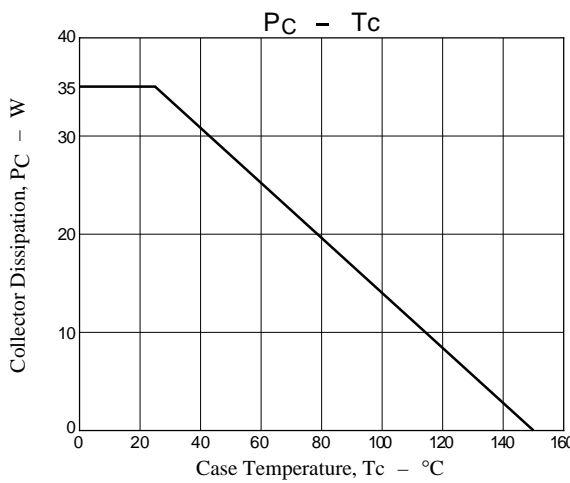
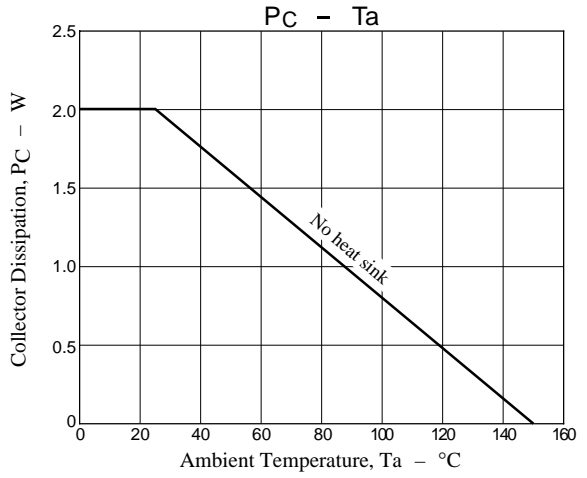
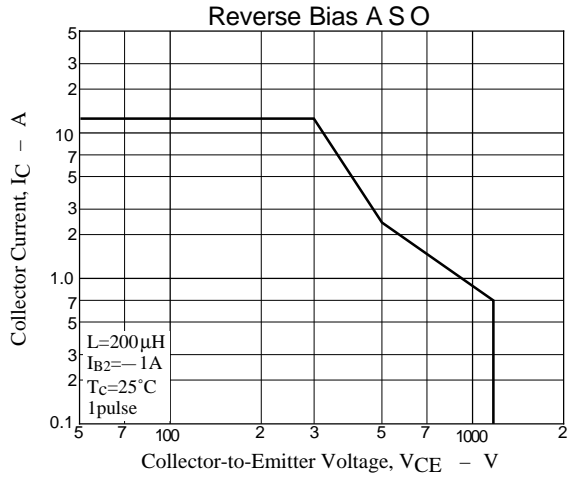
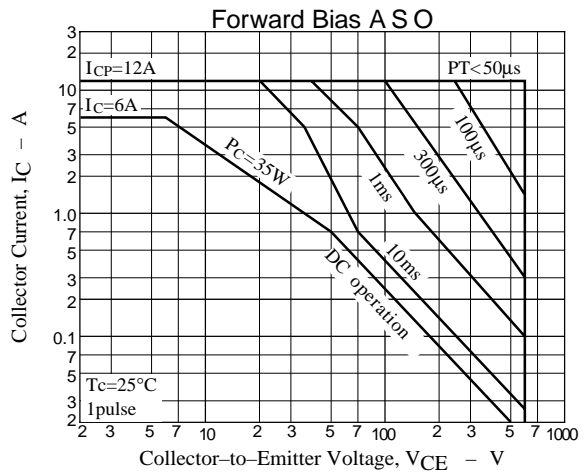
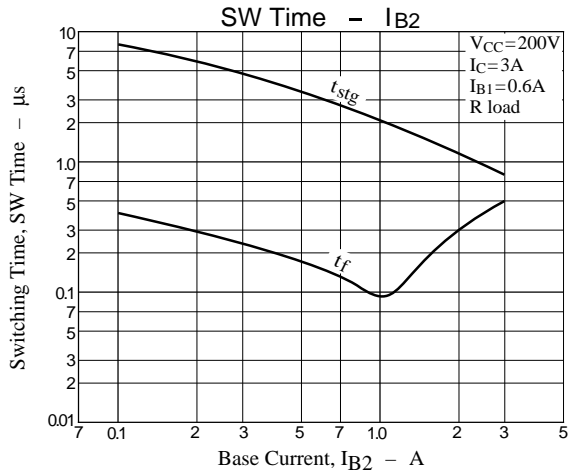
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Switching Time Test Circuit



# 2SC5305LS



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