

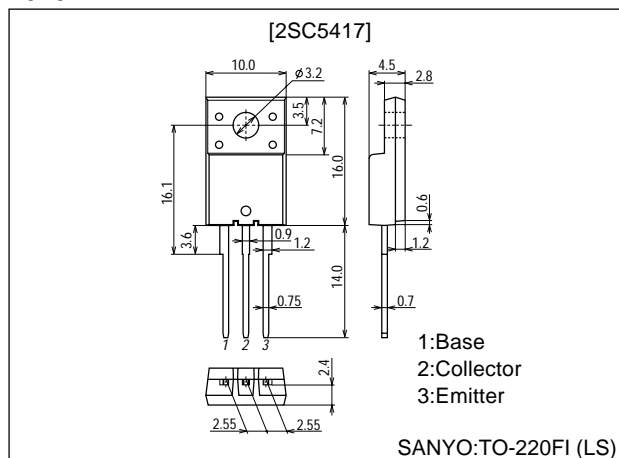
**2SC5417LS****Inverter Lighting Applications****Features**

- High breakdown voltage.
- High reliability (Adoption of HVP process).
- Adoption of MBIT process.

**Package Dimensions**

unit:mm

2079D

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

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	$I_C$		3	A
Collector Current (pulse)	$I_{CP}$		6	A
Collector Dissipation	$P_C$		2	W
		$T_c = 25^\circ\text{C}$	25	W
Junction Temperature	$T_j$		150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 600\text{V}, I_E = 0$			10	$\mu\text{A}$
Collector Cutoff Current	$I_{CES}$	$V_{CE} = 1200\text{V}, R_{BE} = 0$			1.0	mA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}, I_B = 0$	600			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 9\text{V}, I_C = 0$			1.0	mA
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1.5\text{A}, I_B = 0.3\text{A}$			1.0	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 1.5\text{A}, I_B = 0.3\text{A}$			1.5	V
DC Current Gain	$h_{FE1}$	$V_{CE} = 5\text{V}, I_C = 0.1\text{A}$	30	40	50	
	$h_{FE2}$	$V_{CE} = 5\text{V}, I_C = 1.0\text{A}$	10			
Storage Time	$t_{stg}$	$I_C = 1.5\text{A}, I_{B1} = 0.3\text{A}, I_{B2} = -0.6\text{A}$			2.5	$\mu\text{s}$
Fall Time	$t_f$	$I_C = 1.5\text{A}, I_{B1} = 0.3\text{A}, I_{B2} = -0.6\text{A}$			0.15	$\mu\text{s}$

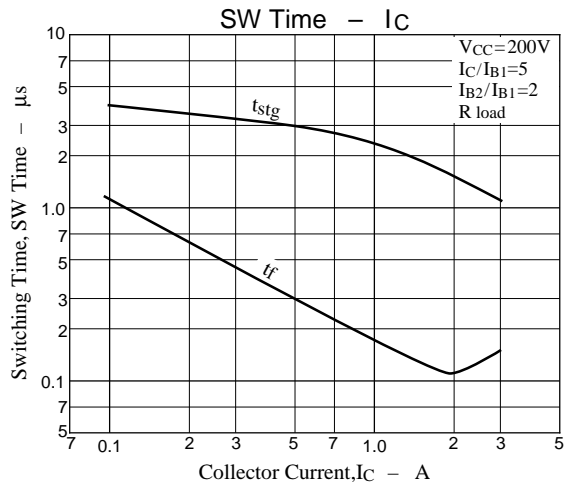
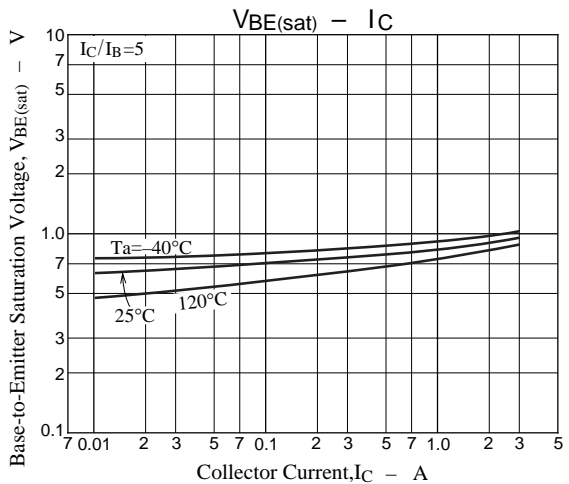
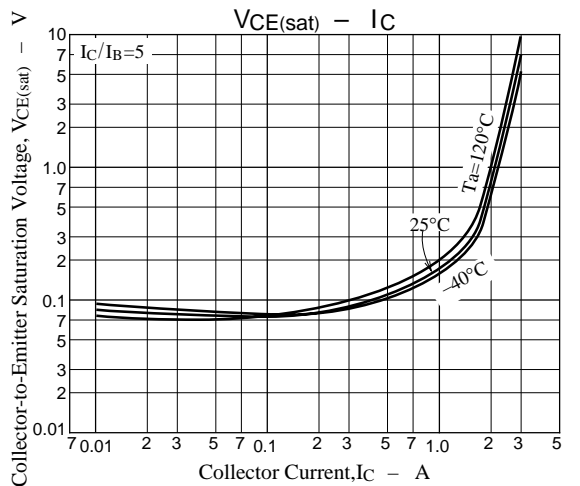
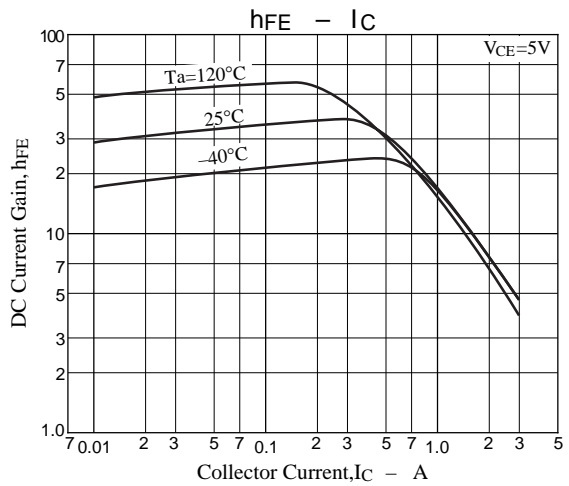
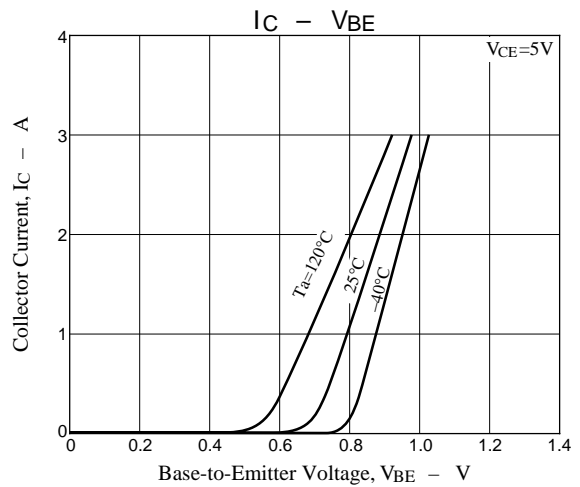
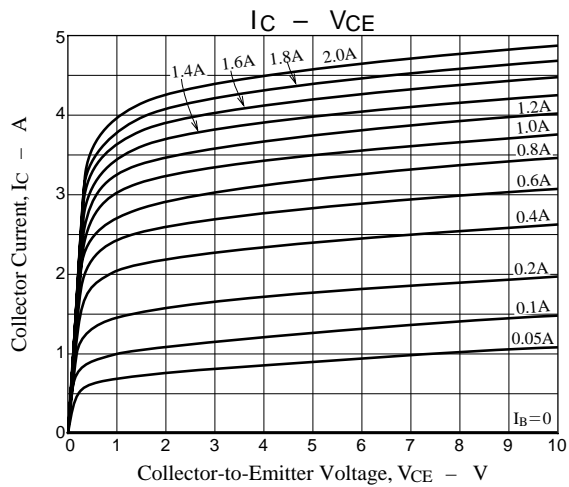
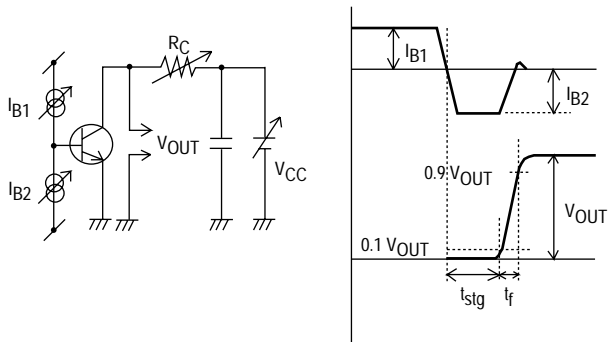
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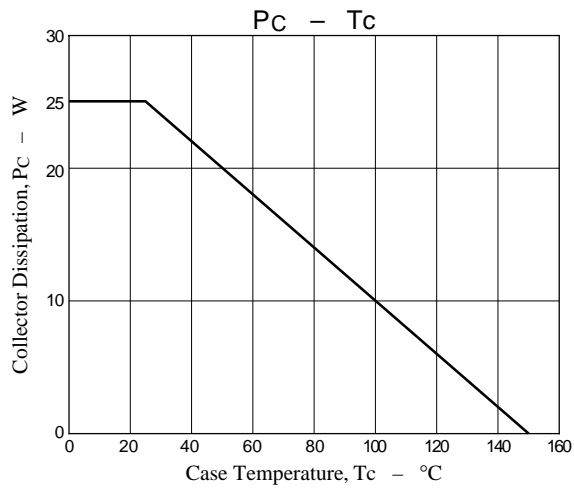
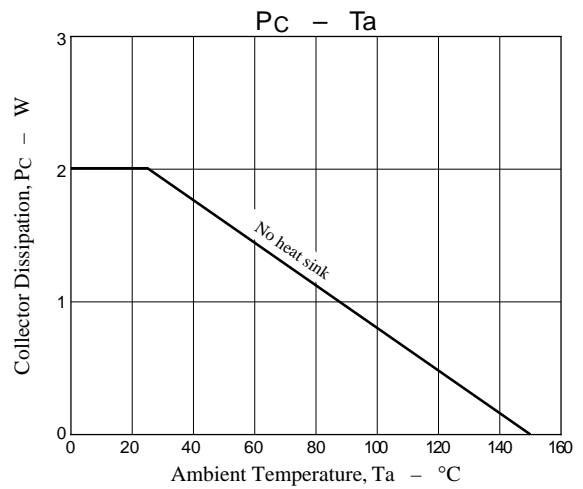
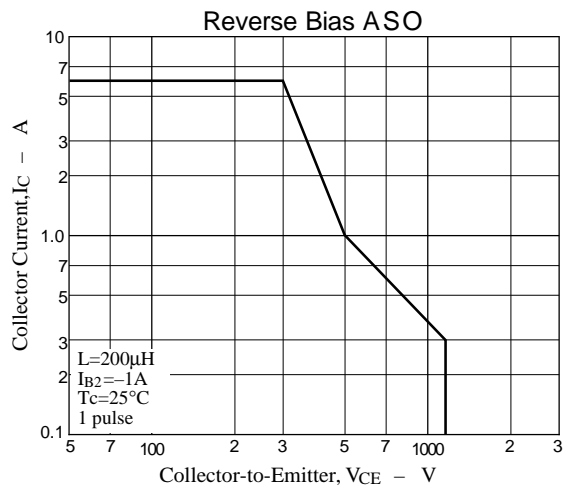
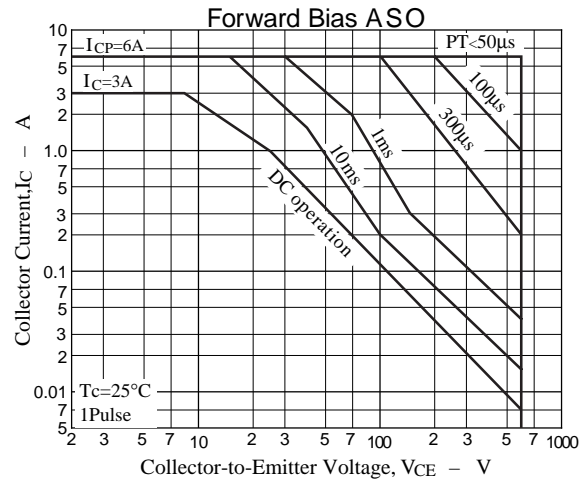
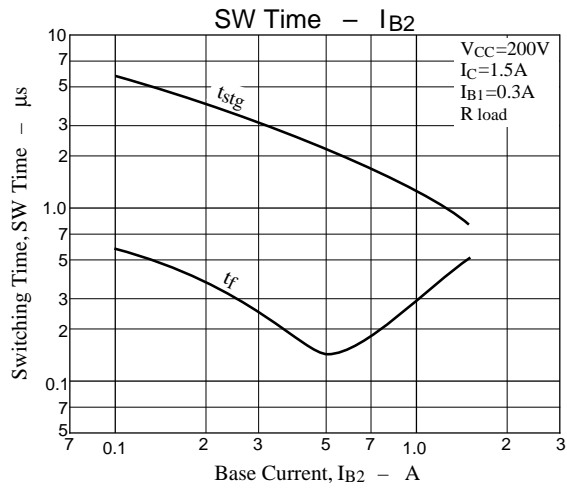
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# Switching Time Test Circuit



## 2SC5417LS



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