



SANYO Semiconductors

DATA SHEET

TT2274T

 — NPN Triple Diffused Planar Silicon Transistor
Switching Regulator Applications

Features

- High breakdown voltage ($V_{CB0} \geq 1400V$).
- Ultrahigh-speed switching.
- Wide ASO.

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		1400	V
Collector-to-Emitter Voltage	V_{CEO}		800	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		1	A
Collector Current (Pulse)	I_{CP}	$PW \leq 300\mu s$, duty cycle $\leq 10\%$	2	A
Collector Dissipation	P_C		1	W
		$T_c = 25^\circ C$	25	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_{CB0}	$V_{CB} = 800V$, $I_E = 0A$			10	μA
Collector Cutoff Current	I_{CES}	$V_{CB} = 1400V$, $R_{BE} = 0\Omega$			1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V$, $I_C = 0A$			1	mA
DC Current Gain	h_{FE1}	$V_{CE} = 5V$, $I_C = 0.1A$		15	35	
	h_{FE2}	$V_{CE} = 5V$, $I_C = 0.5A$		4		

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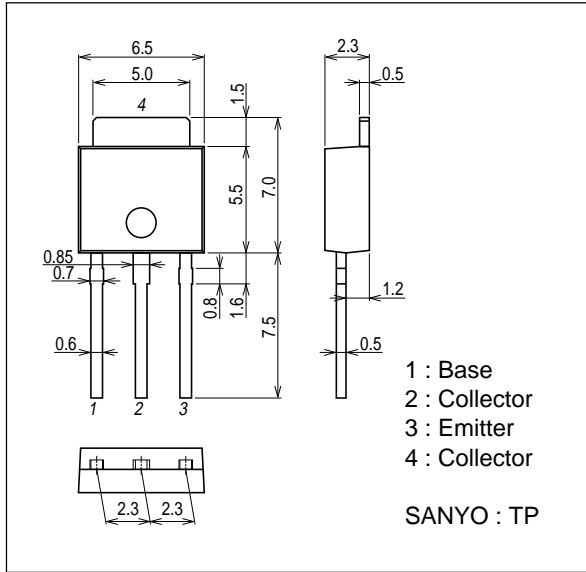
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=0.25A, I_B=0.05A$			1.5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=0.5A, I_B=0.1A$			1.5	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0A$	1400			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=5mA, R_{BE}=\infty$	800			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0A$	5			V
Storage Time	t_{stg}	$I_C=0.5A, I_{B1}=0.1A, I_{B2}=-0.25A, R_L=400\Omega, V_{CC}=200V$		1.5	3.0	μs
Fall Time	t_f	$I_C=0.5A, I_{B1}=0.1A, I_{B2}=-0.25A, R_L=400\Omega, V_{CC}=200V$		0.25	0.4	μs

Package Dimensions

unit : mm (typ)

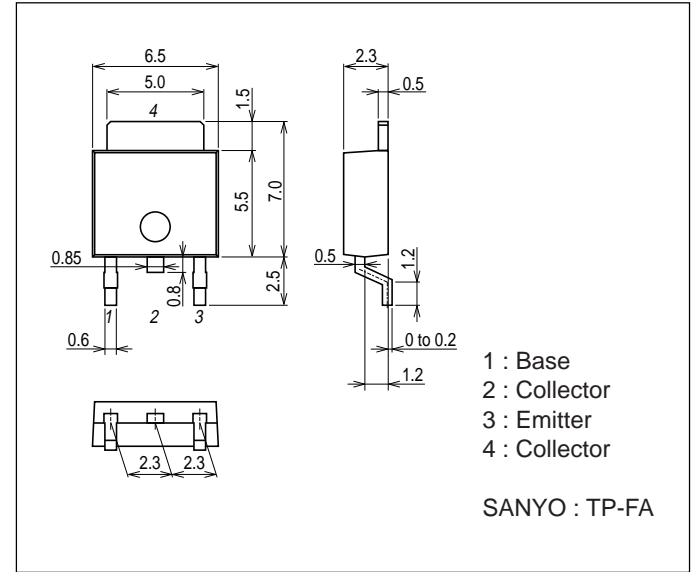
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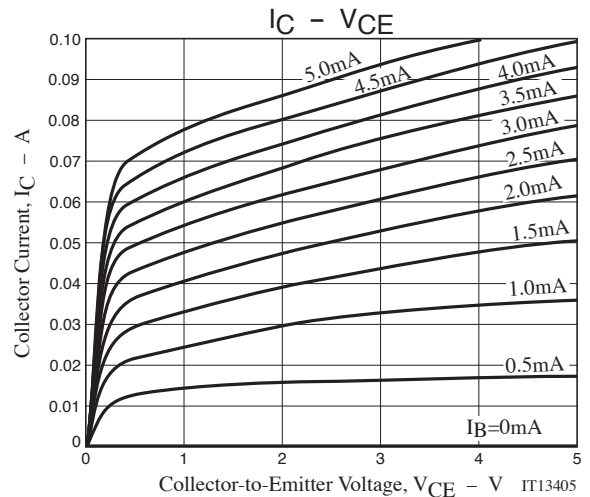
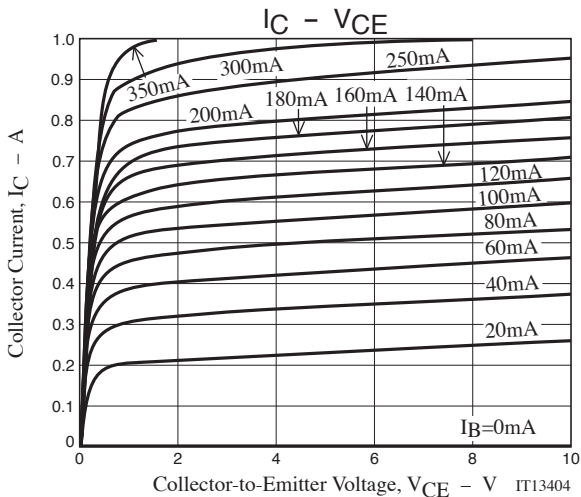
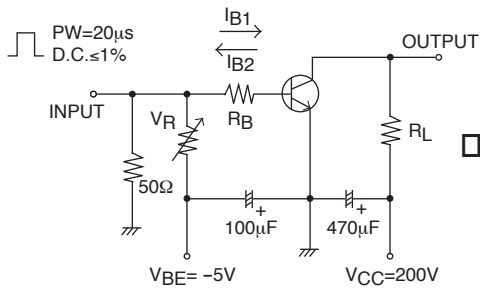
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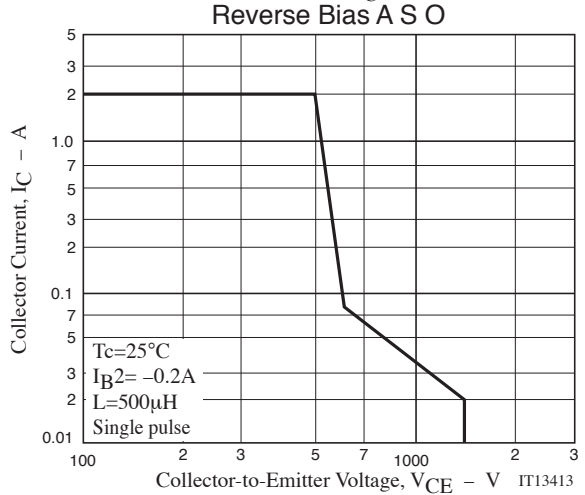
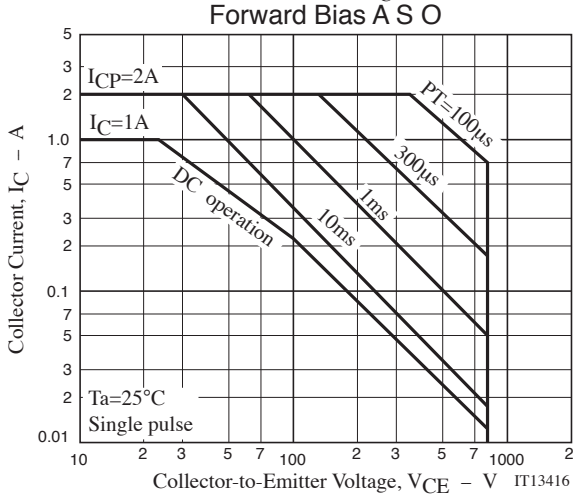
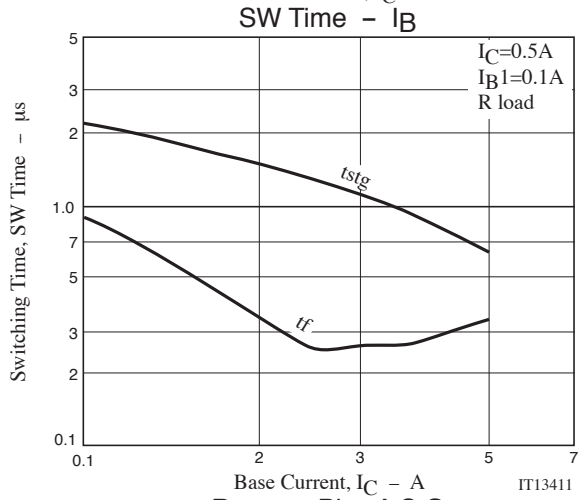
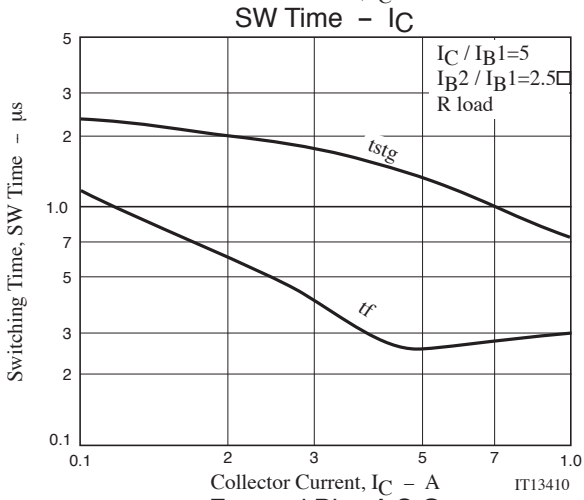
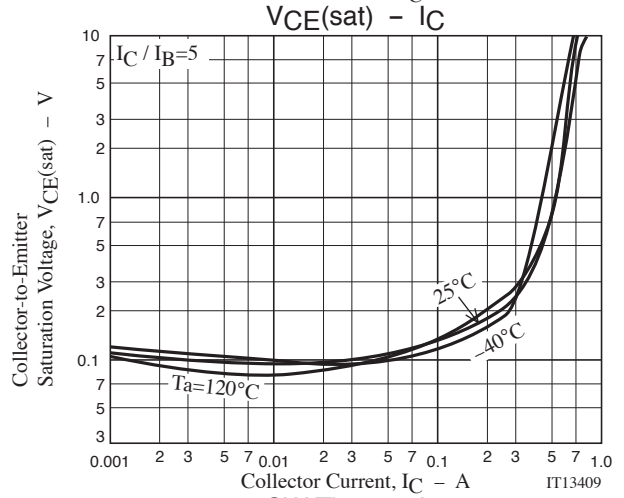
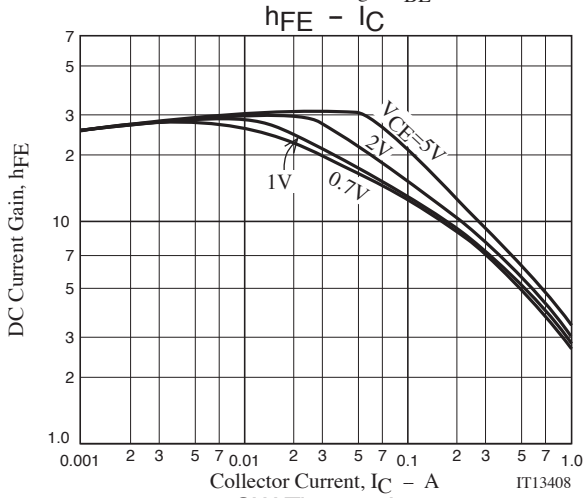
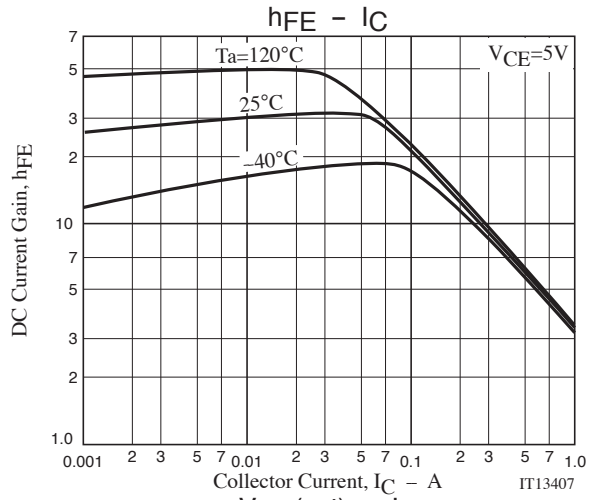
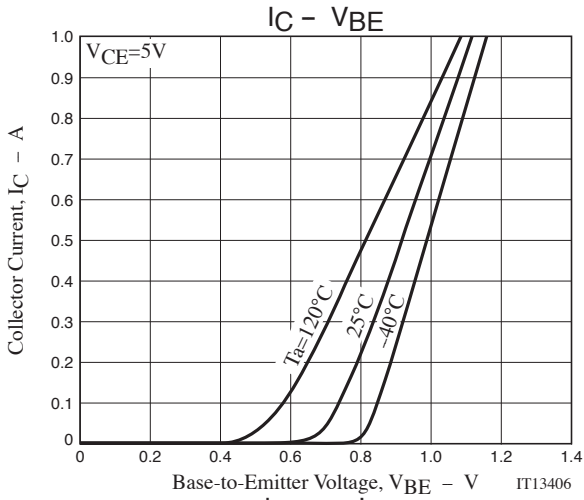
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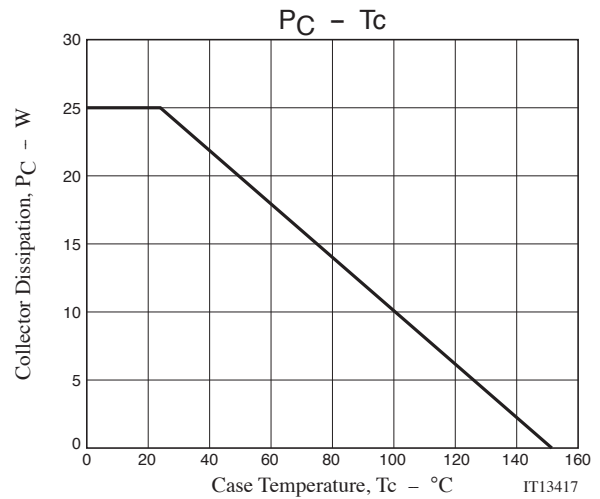
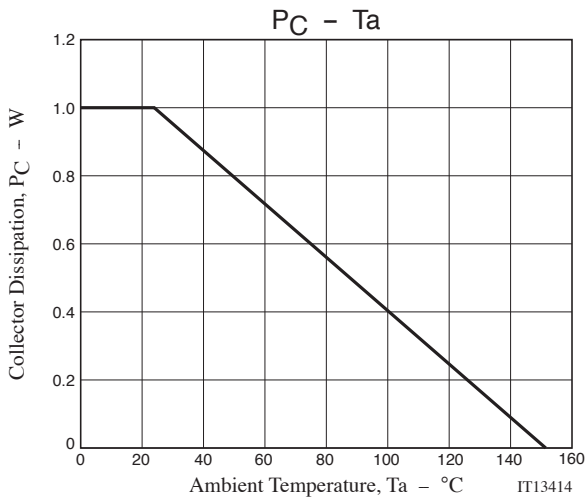
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Switching Time Test Circuit







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