



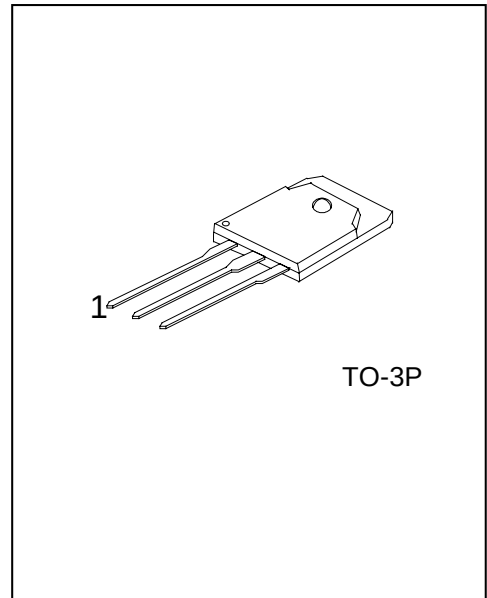
2SC2625

NPN EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE HIGH SPEED SWITCHING

■ FEATURES

- * High voltage, high speed switching
- * High reliability



*Pb-free plating product number: 2SC2625L

■ PIN INFORMATION

PIN NO.	PIN NAME
1	Base
2	Collector
3	Emitter

■ ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead free plating		
2SC2625-T3P-T	2SC2625L-T3P-T	TO-3P	Tube

■ ABSOLUTE MAXIMUM RATINGS ($T_C=25^\circ\text{C}$)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector Base Voltage	V_{CBO}	450	V
Collector Emitter Voltage	V_{CEO}	400	V
	$V_{CEO(SUS)}$	400	V
Emitter Base Voltage	V_{EBO}	7	V
Collector Current	I_C	10	A
Base Current	I_B	3	A
Power Dissipation	P_D	80	W
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

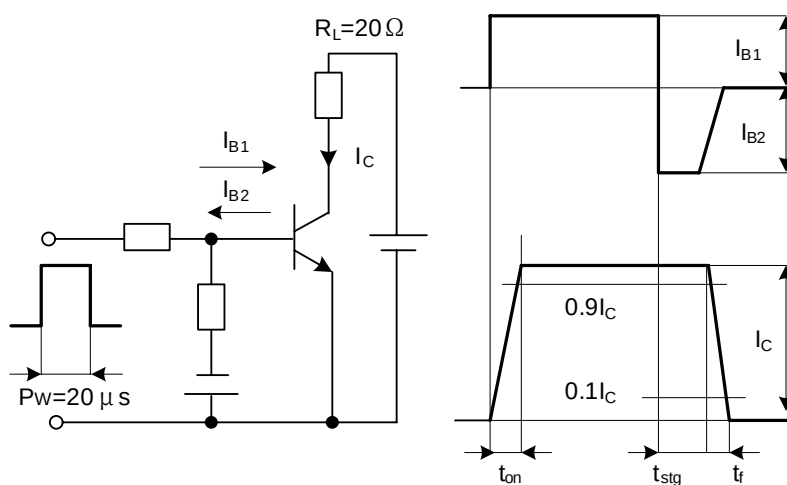
■ ELECTRICAL SPECIFICATIONS ($T_C=25^\circ\text{C}$, Unless Otherwise Specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Base Voltage	V_{CBO}	$I_{CBO}=1\text{mA}$	450			V
Collector Emitter Voltage	V_{CEO}	$I_{CEO}=10\text{mA}$	400			V
	$V_{CEO(SUS)}$	$I_C=1\text{A}$	400			V
Emitter Base Voltage	V_{EBO}	$I_{EBO}=0.1\text{mA}$	7			V
Collector-Emitter Saturation Voltage	$V_{CE(Sat)}$	$I_C=4\text{A}, I_B=0.8\text{A}$			1.2	V
Base Emitter Saturation Voltage	$V_{BE(Sat)}$				1.5	V
Collector Cut-off Current	I_{CBO}	$V_{CBO}=450\text{V}$			1.0	mA
Emitter Cut-off Current	I_{EBO}	$V_{EBO}=7\text{V}$			0.1	mA
DC Current Gain	h_{FE}	$I_C=4\text{A}, V_{CE}=5\text{V}$	10			
Switching Time	t_{ON}	$I_C=7.5\text{A}, I_{B1}=-I_{B2}=1.5\text{A}$ $R_L=20\Omega, P_w=20\mu\text{s}, \text{Duty} \leq 2\%$			1.0	μs
	t_{STG}				2.0	μs
	t_F				1.0	μs

■ THERMAL CHARACTERISTICS

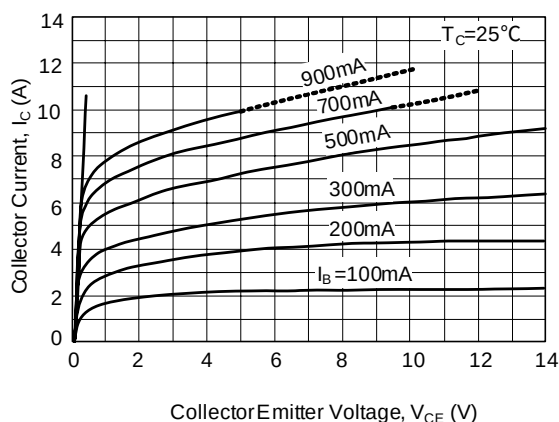
PARAMETER	SYMBOL	RATINGS	UNIT
Thermal Resistance Junction to Case	θ_{JC}	1.55	$^\circ\text{C/W}$

■ SWITCHING TIME TEST CIRCUIT

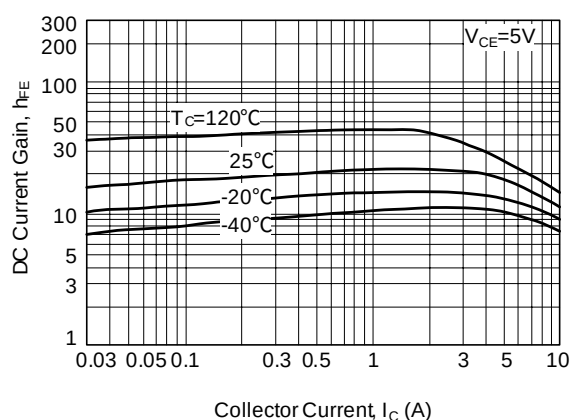


TYPICAL CHARACTERISTICS

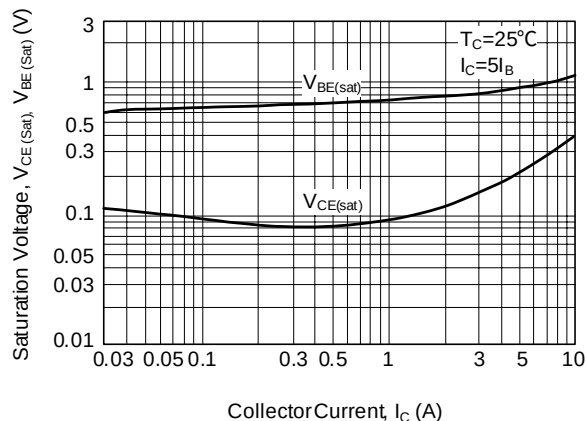
Collector Output Characteristics



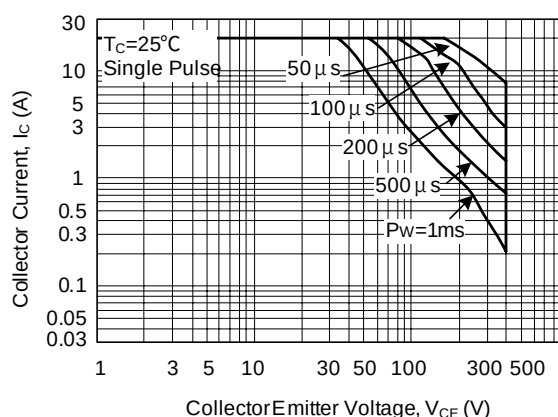
DC Current Gain



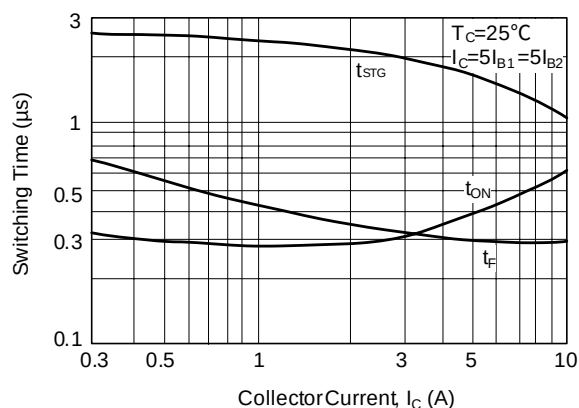
Base and Collector Saturation Voltage



Safe Operating Area



Switching Time



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