



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

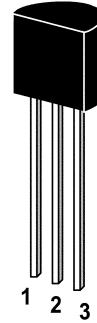
ST 2N5400 / 2N5401

PNP Silicon Epitaxial Planar Transistors

for general purpose, high voltage amplifier applications.

As complementary types the NPN transistors
ST 2N5550 and ST 2N5551 are recommended.

On special request, these transistors can be
manufactured in different pin configurations.



1. Emitter 2. Base 3. Collector

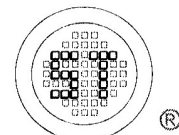
TO-92 Plastic Package

Weight approx. 0.19g

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

		Symbol	Value	Unit
Collector Emitter Voltage	ST 2N5400	$-V_{CEO}$	120	V
	ST 2N5401	$-V_{CEO}$	150	V
Collector Base Voltage	ST 2N5400	$-V_{CBO}$	130	V
	ST 2N5401	$-V_{CBO}$	160	V
Emitter Base Voltage		$-V_{EBO}$	5	V
Collector Current		$-I_C$	600	mA
Power Dissipation		P_{tot}	625 ¹⁾	mW
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_s	-55 to +150	$^\circ\text{C}$

¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case.



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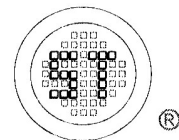
Dated: 07/12/2002

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ST 2N5400 / 2N5401**Characteristics at T_{amb}=25 °C**

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain	at -V _{CE} =5V, -I _C =1mA	ST 2N5400	h _{FE}	30	-	-
		ST 2N5401	h _{FE}	50	-	-
	at -V _{CE} =5V, -I _C =10mA	ST 2N5400	h _{FE}	40	-	180
		ST 2N5401	h _{FE}	60	-	240
	at -V _{CE} =5V, -I _C =50mA	ST 2N5400	h _{FE}	40	-	-
		ST 2N5401	h _{FE}	50	-	-
Collector Emitter Breakdown Voltage	at -I _C =1mA	ST 2N5400	-V _{(BR)CEO}	120	-	V
		ST 2N5401	-V _{(BR)CEO}	150	-	V
Collector Base Breakdown Voltage	at -I _C =100μA	ST 2N5400	-V _{(BR)CBO}	130	-	V
		ST 2N5401	-V _{(BR)CBO}	160	-	V
Emitter Base Breakdown Voltage	at -I _E =10μA		-V _{(BR)EBO}	5	-	V
Collector Cutoff Current	at -V _{CB} =100V	ST 2N5400	-I _{CB0}	-	-	nA
	at -V _{CB} =120V	ST 2N5401	-I _{CB0}	-	-	nA
Emitter Cutoff Current	at -V _{EB} =3V		-I _{EBO}	-	-	nA
Collector Saturation Voltage	at -I _C =10mA, -I _B =1mA		-V _{CE sat}	-	-	0.2 V
	at -I _C =50mA, -I _B =5mA		-V _{CE sat}	-	-	0.5 V
Base Saturation Voltage	at -I _C =10mA, -I _B =1mA		-V _{BEsat}	-	-	1 V
	at -I _C =50mA, -I _B =5mA		-V _{BEsat}	-	-	1 V
Gain Bandwidth Product	at -V _{CE} =10V, -I _C =10mA, f=100MHz	ST 2N5400	f _T	100	-	400 MHz
		ST 2N5401	f _T	100	-	400 MHz
Collector Base Capacitance	at -V _{CB} =10V, f=1MHz		C _{CB0}	-	-	6 pF
Noise Figure	at -V _{CE} =5V, -I _C =200μA, R _G =2kΩ, f=30Hz...15kHz		F	-	-	8 dB
Thermal Resistance Junction to Ambient			R _{thA}	-	-	200 ¹⁾ K/W

¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case.**SEMTECH**

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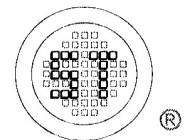
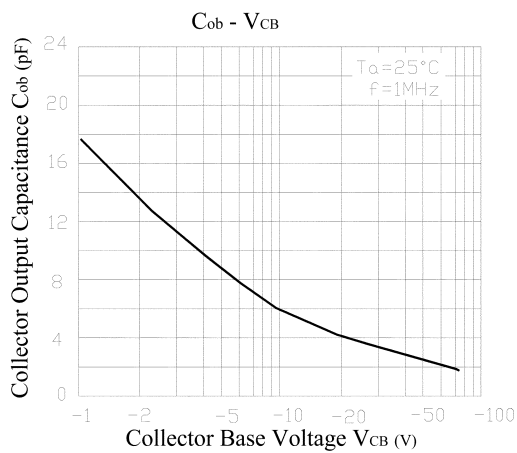
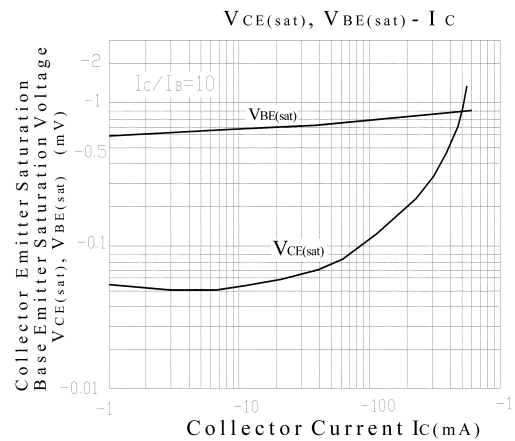
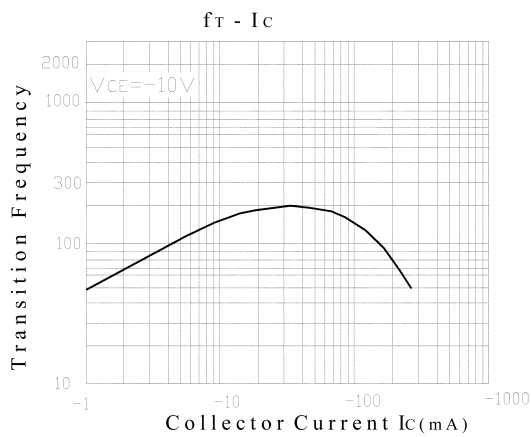
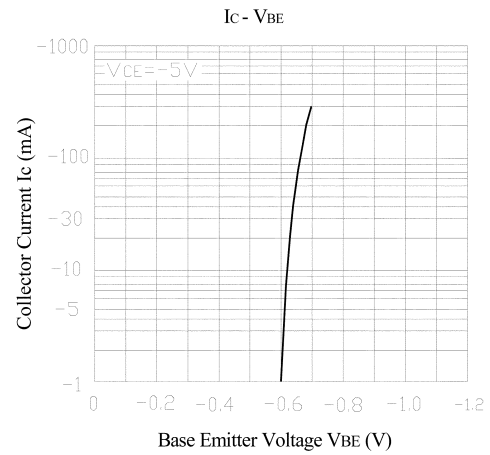
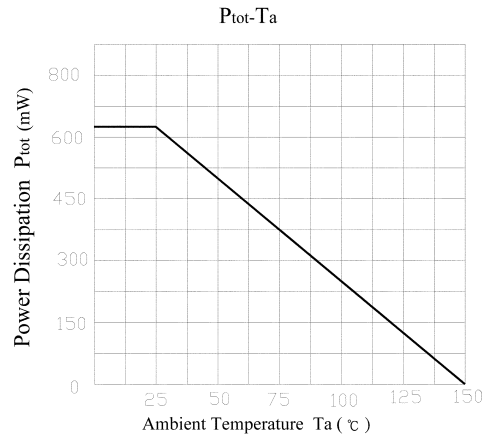
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