

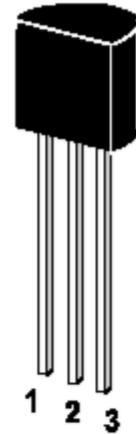
ST 2N5400 / 2N5401

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

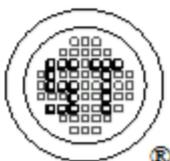
Weight approx. 0.19g



Absolute Maximum Ratings (T_j = 25 °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 _{EB0}	5	V
Collector Current		-I _C	600	mA
Power Dissipation		P _{tot}	625 ¹⁾	mW
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _s	-55 to +150	°C

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



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ISO/TS 16949:2002 Certificate No. 05103
 ISO 14001:2004 Certificate No. 7116
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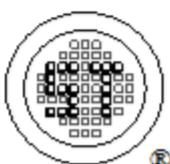
ST 2N5400 / 2N5401

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 $-I_C=100\mu A$	ST 2N5400	$-V_{(BR)CBO}$	130	-	V
		ST 2N5401	$-V_{(BR)CBO}$	160	-	V
Emitter Base Breakdown Voltage	at $-I_E=10\mu A$		$-V_{(BR)EBO}$	5	-	V
Collector Cutoff Current	at $-V_{CB}=100V$	ST 2N5400	$-I_{CBO}$	-	100	nA
	at $-V_{CB}=120V$	ST 2N5401	$-I_{CBO}$	-	50	nA
Emitter Cutoff Current	at $-V_{EB}=3V$		$-I_{EBO}$	-	50	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 $-I_C=10mA, -I_B=1mA$		$-V_{BE(sat)}$	-	1	V
	at $-I_C=50mA, -I_B=5mA$		$-V_{BE(sat)}$	-	1	V
Gain Bandwidth Product	at $-V_{CE}=10V, -I_C=10mA, f=100MHz$	ST 2N5400	f_T	100	-	MHz
		ST 2N5401	f_T	100	-	MHz
Collector Base Capacitance	at $-V_{CB}=10V, f=1MHz$		C_{CBO}	-	6	pF
Noise Figure	at $-V_{CE}=5V, -I_C=200\mu A, R_G=2k\Omega, f=30Hz \dots 15kHz$		F	-	8	dB
Thermal Resistance Junction to Ambient			$R_{\theta JA}$	-	200 ¹⁾	K/W

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



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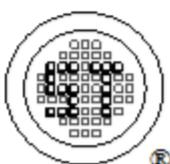
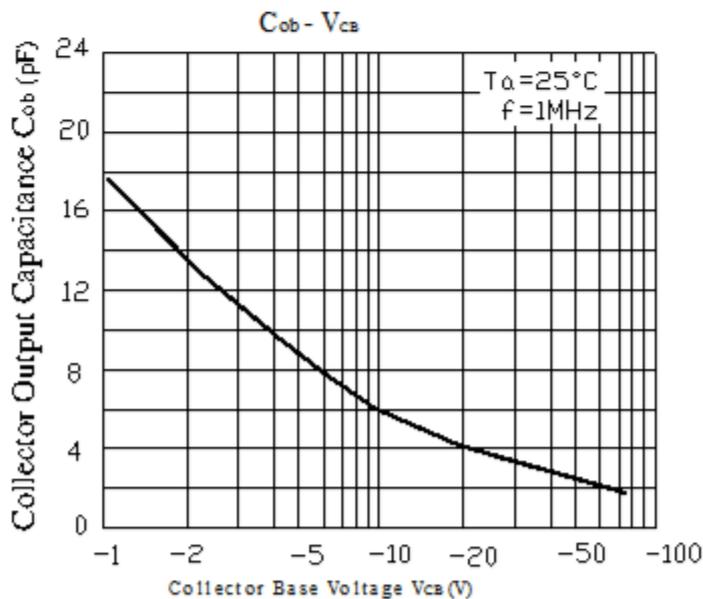
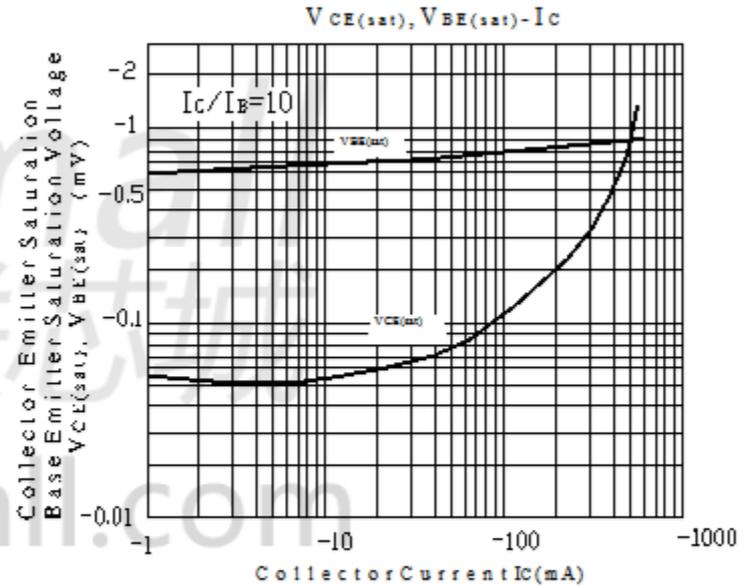
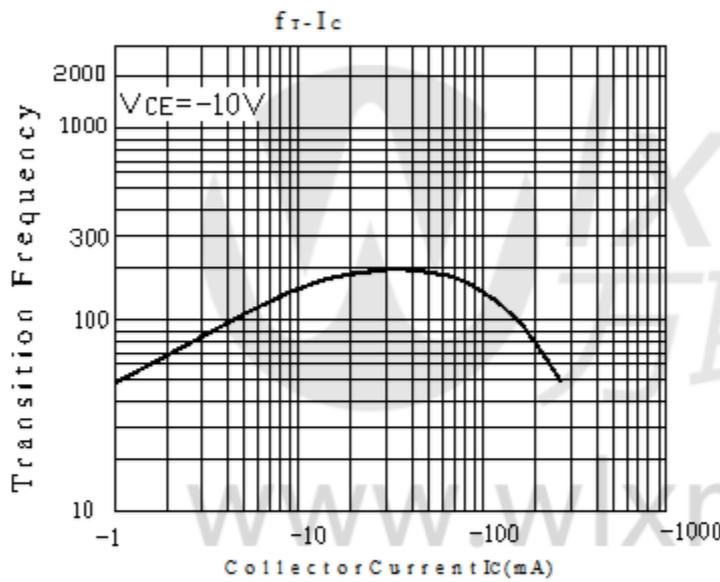
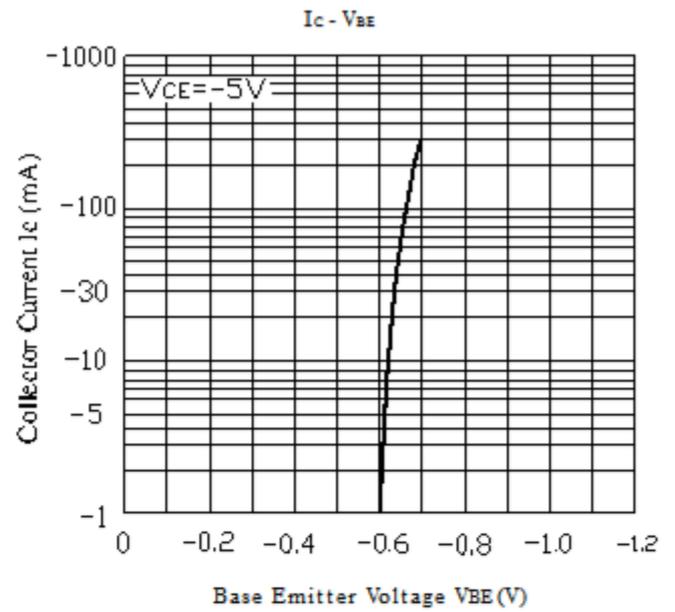
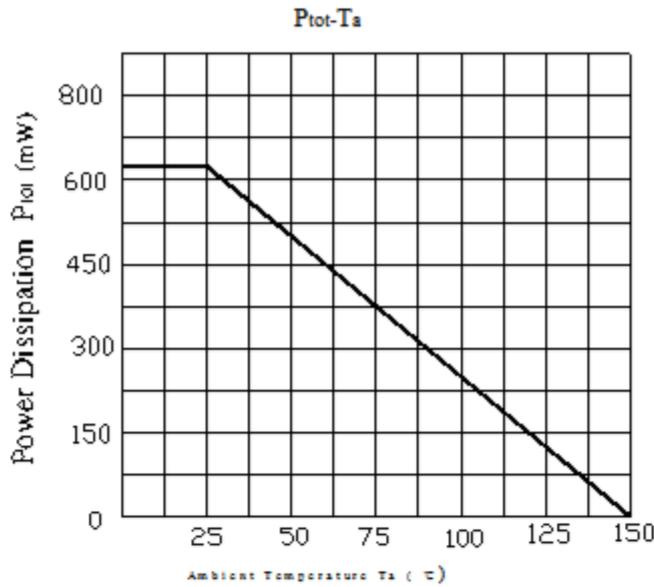
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ISO/TS 16949 : 2002 Certificate No. 05103
 ISO 14001:2004 Certificate No. 7116
 ISO 9001:2000 Certificate No. 050098

Dated: 07/12/2002

ST 2N5400 / 2N5401



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