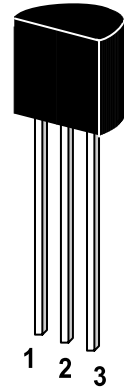


ST 2N3704

NPN Silicon Epitaxial Planar Transistor

for general purpose applications.

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

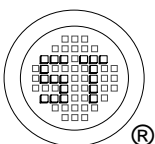


1. Emitter 2. Base 3. Collector

TO-92 Plastic Package
Weight approx. 0.19g

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

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	50	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	600	mA
Power Dissipation	P_{tot}	625	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to +150	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

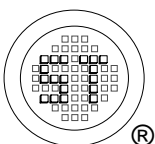
Dated : 02/04/2005

ST 2N3704

Characteristics at $T_{amb}=25^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=2\text{V}$, $I_C=50\text{mA}$	$*h_{FE}$	100	-	300	-
Collector Base Breakdown Voltage at $I_C=100\mu\text{A}$	BV_{CBO}	50	-	-	V
Collector Emitter Breakdown Voltage at $I_C=10\text{mA}$	$*BV_{CEO}$	30	-	-	V
Emitter Base Breakdown Voltage at $I_E=100\mu\text{A}$	BV_{EBO}	5	-	-	V
Collector Cutoff Current at $V_{CB}=20\text{V}$	I_{CBO}	-	-	100	nA
Emitter Cutoff Current at $V_{BE}=3\text{V}$	I_{EBO}	-	-	100	nA
Output Capacitance at $V_{CB}=10\text{V}$, $f=1\text{MHz}$	Cob	-	-	12	pF
Collector Emitter Saturation Voltage at $I_C=100\text{mA}$, $I_B=5\text{mA}$	$*V_{CE(sat)}$	-	-	0.6	V
Base Emitter On Voltage at $V_{CE}=2\text{V}$, $I_C=100\text{mA}$	$*V_{BE(on)}$	0.5	-	1	V
Current Gain Bandwidth Product at $V_{CE}=2\text{V}$, $I_C=50\text{mA}$, $f=20\text{MHz}$	f_T	100	-	-	MHz

* Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$.



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