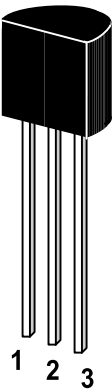


ST 2SC945

NPN Silicon Epitaxial Planar Transistor
for switching and AF amplifier applications.

The transistor is subdivided into five groups, R, O, Y, P and L, according to its DC current gain. As complementary type the PNP transistor ST 2SA733 is recommended.

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



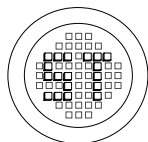
1. Emitter 2. Collector 3. Base

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}	60	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to +150	$^\circ\text{C}$

G S P FORM A IS AVAILABLE



®

РАДИОТЕХ

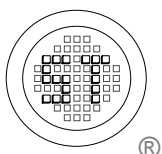
Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

ST 2SC945

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

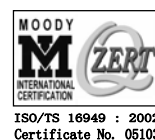
	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=6\text{V}$, $I_C=1\text{mA}$					
Current Gain Group R	h_{FE}	40	-	80	-
O	h_{FE}	70	-	140	-
Y	h_{FE}	120	-	240	-
P	h_{FE}	200	-	400	-
L	h_{FE}	350	-	700	-
Collector Base Breakdown Voltage at $I_C=100\mu\text{A}$	$V_{(BR)CBO}$	60	-	-	V
Collector Emitter Breakdown Voltage at $I_C=10\text{mA}$	$V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at $I_E=10\mu\text{A}$	$V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current at $V_{CB}=40\text{V}$	I_{CBO}	-	-	0.1	μA
Emitter Cutoff Current at $V_{EB}=3\text{V}$	I_{EBO}	-	-	0.1	μA
Collector Saturation Voltage at $I_C=100\text{mA}$, $I_B=10\text{mA}$	$V_{CE(sat)}$	-	0.15	0.3	V
Gain Bandwidth Product at $V_{CE}=6\text{V}$, $I_C=10\text{mA}$	f_T	-	300	-	MHz
Output Capacitance at $V_{CB}=6\text{V}$, $f=1\text{MHz}$	C_{OB}	-	2.5	-	pF
Noise Figure at $V_{CE}=6\text{V}$, $I_E=0.5\text{mA}$ at $f=1\text{KHz}$, $R_S=500\Omega$	NF	-	4	-	dB

G S P FORM A IS AVAILABLE



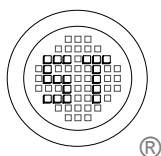
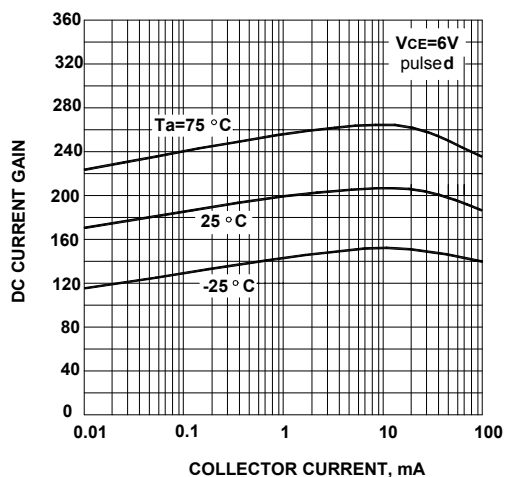
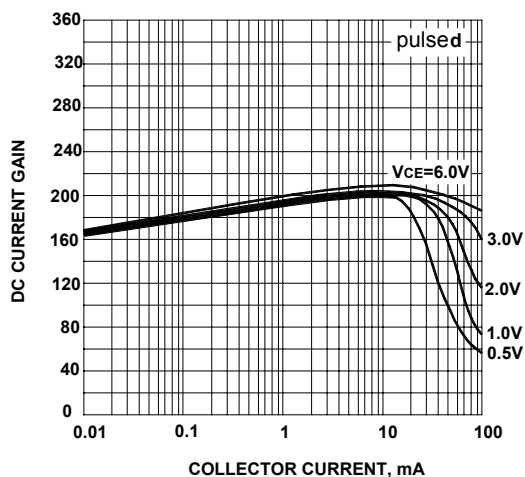
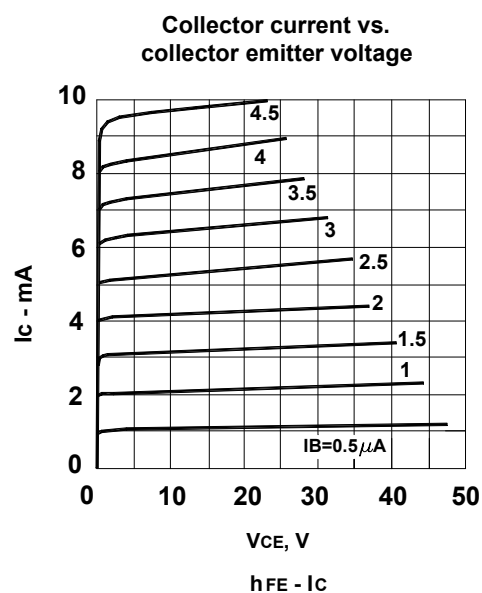
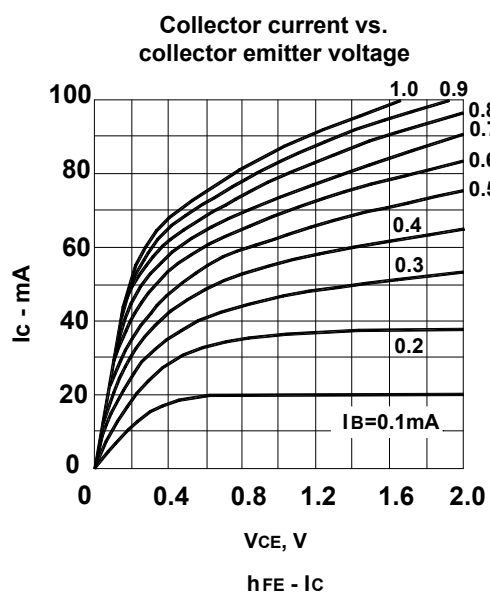
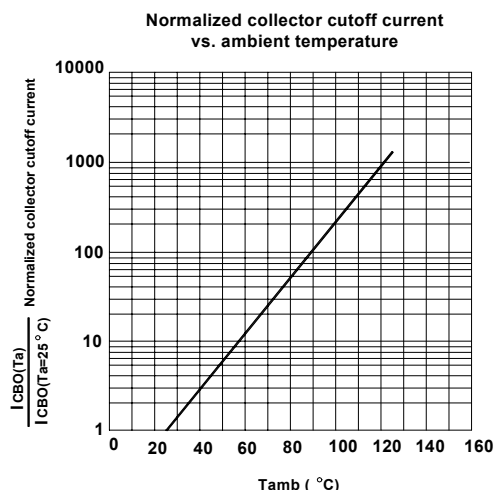
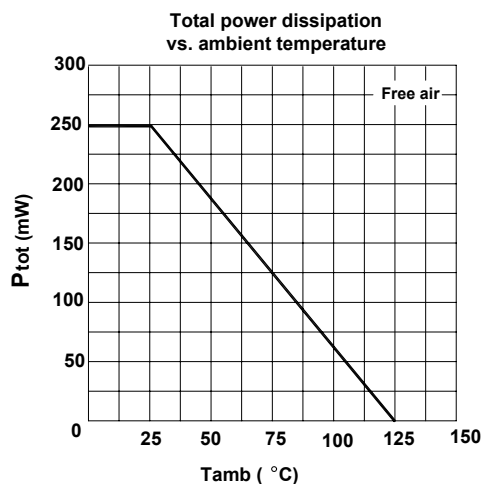
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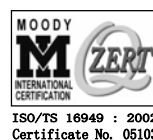
Dated : 22/07/2004

ST 2SC945



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116

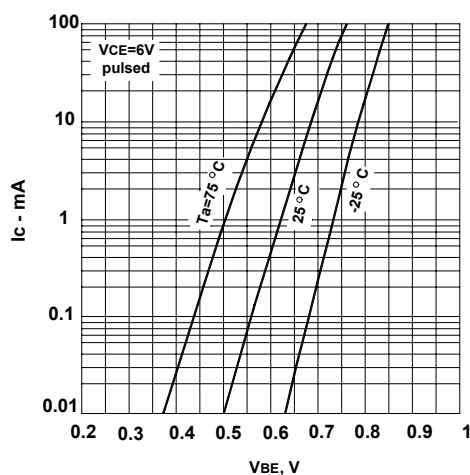


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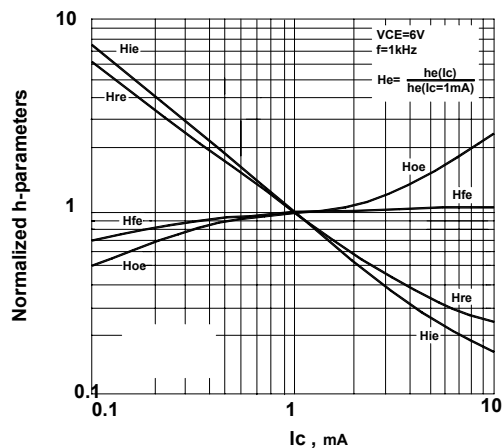
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ST 2SC945

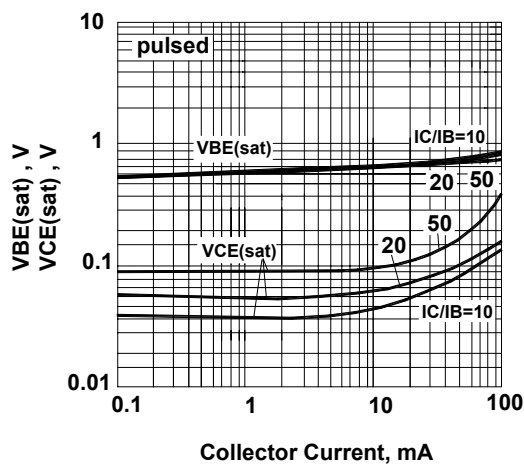
Collector current vs. base emitter voltage



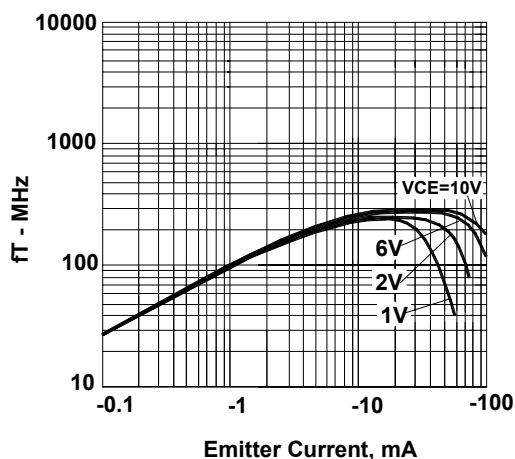
Normalized h-parameters vs. collector current



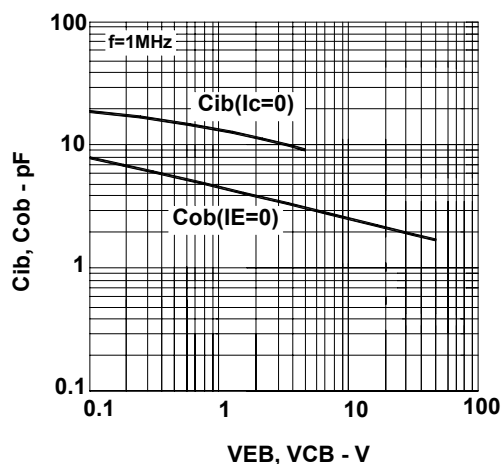
Collector and base saturation voltage vs. collector current



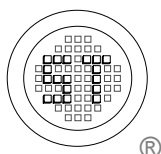
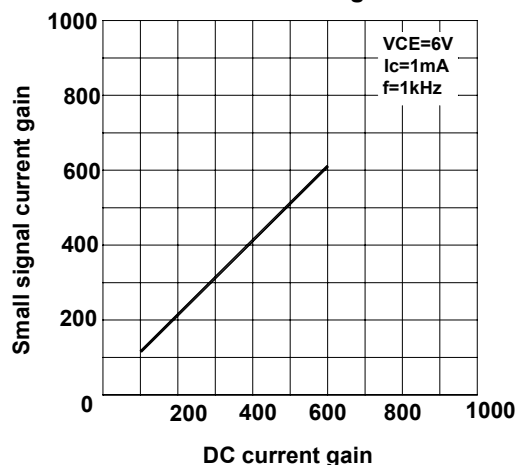
f_T - I_E



VEB, VCB vs. Cib, Cob

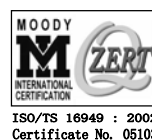


Small signal current gain vs. DC current gain



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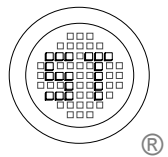
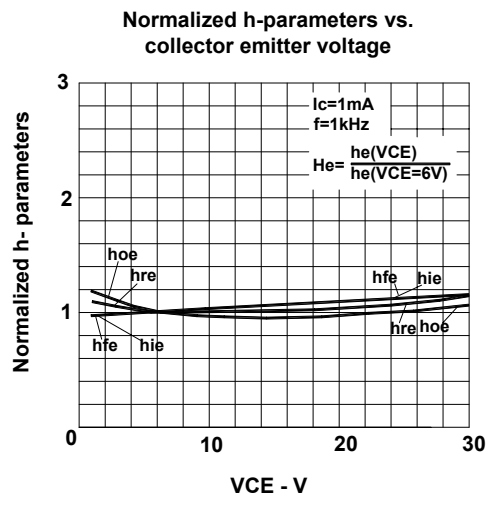
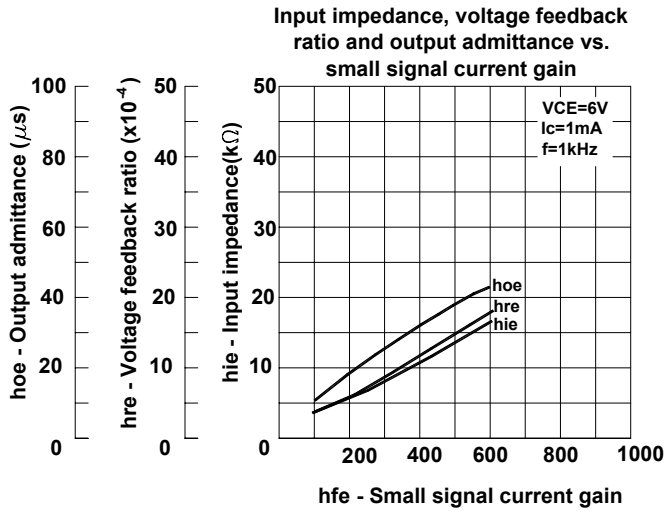


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Dated : 22/07/2004



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