

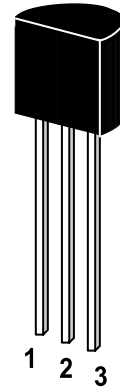
ST 2SA733

PNP 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 NPN transistor ST 2SC945 is recommended.

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



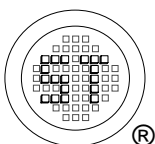
1. Emitter 2. Collector 3. Base

TO-92 Plastic Package

Weight approx. 0.19g

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

	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	60	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	50	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current	$-I_{\text{C}}$	150	mA
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{s}	-55 to +150	$^\circ\text{C}$



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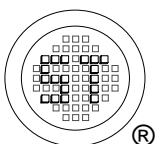


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Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	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 $-V_{CB}=60\text{V}$	$-I_{CBO}$	-	-	0.1	μA
Emitter Cutoff Current at $-V_{EB}=5\text{V}$	$-I_{EBO}$	-	-	0.1	μA
Collector Saturation Voltage at $-I_C=100\text{mA}$, $-I_B=10\text{mA}$	$-V_{CE(sat)}$	-	0.18	0.3	V
Base Emitter Voltage at $-V_{CE}=6\text{V}$, $-I_C=1\text{mA}$	$-V_{BE(on)}$	0.5	0.62	0.8	V
Gain Bandwidth Product at $-V_{CE}=6\text{V}$, $-I_C=10\text{mA}$	f_T	50	180	-	MHz
Output Capacitance at $-V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	2.8	-	pF
Noise Figure at $-V_{CE}=6\text{V}$, $-I_C=0.3\text{mA}$ $f=100\text{Hz}$, $R_S=10\text{K}\Omega$	F	-	6	20	dB



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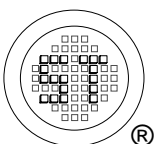
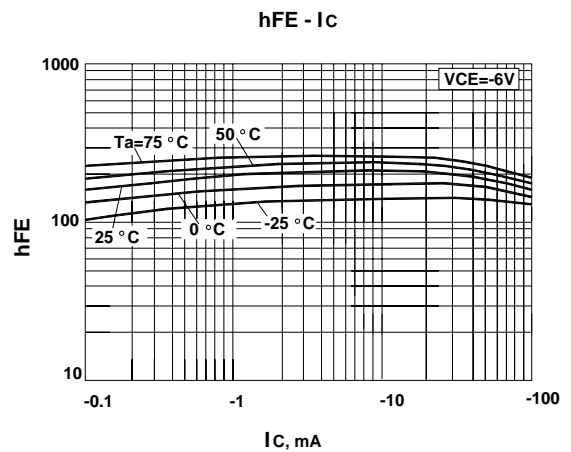
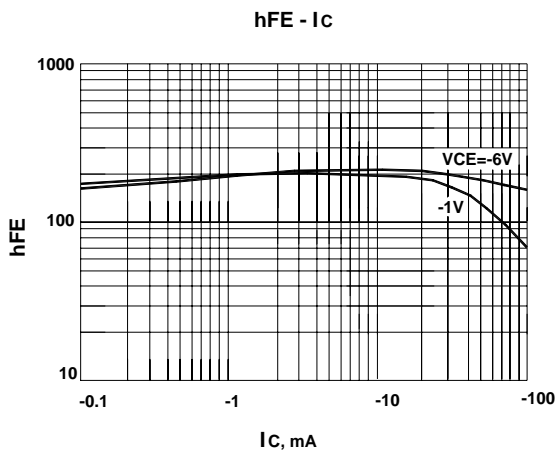
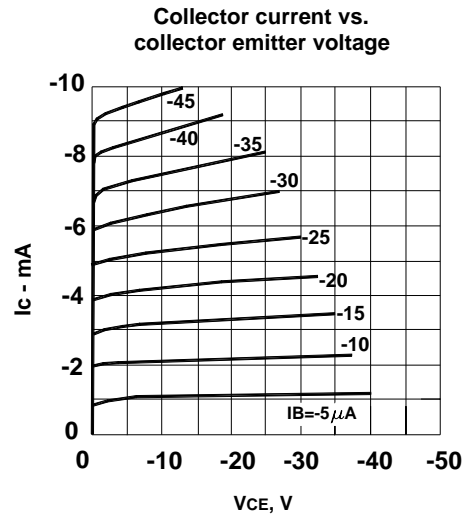
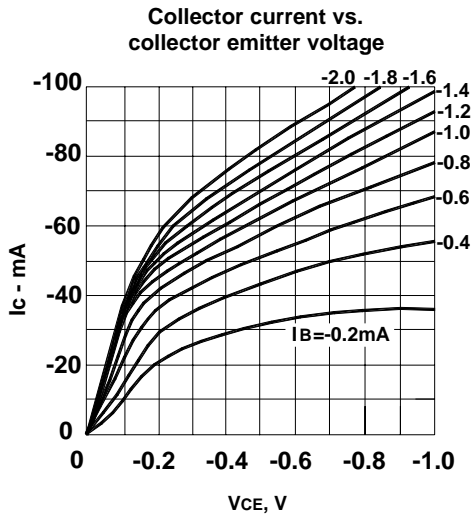
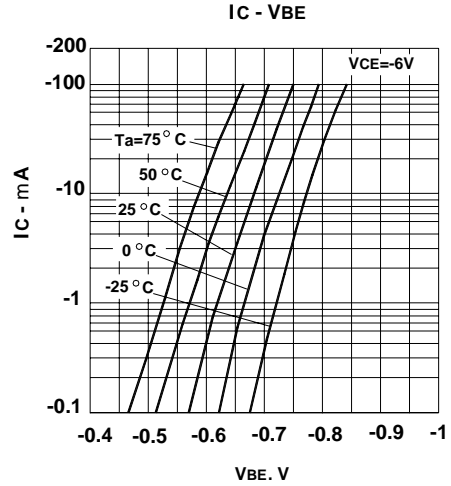
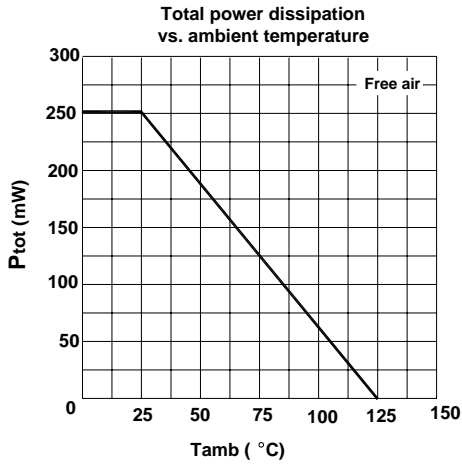
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ISO 9001:2000
Certificate No. 0506098

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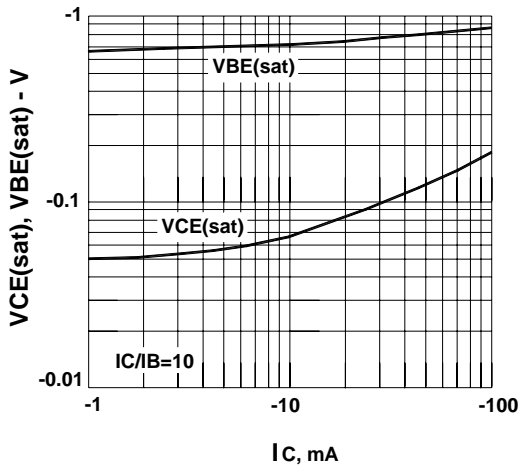


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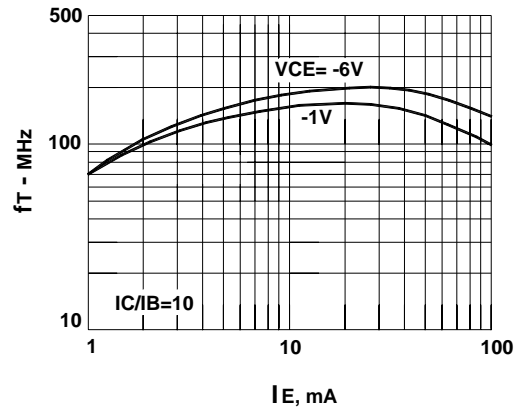
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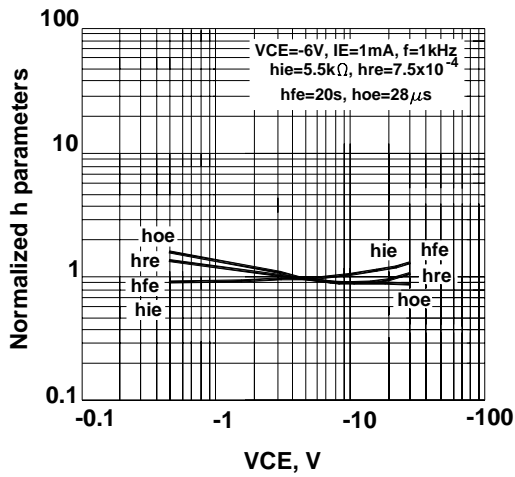
VCE(sat), VBE(sat) - I_C



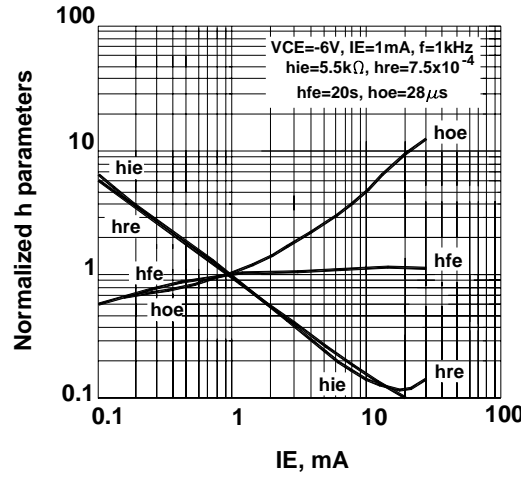
f_T - I_E



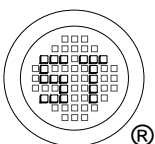
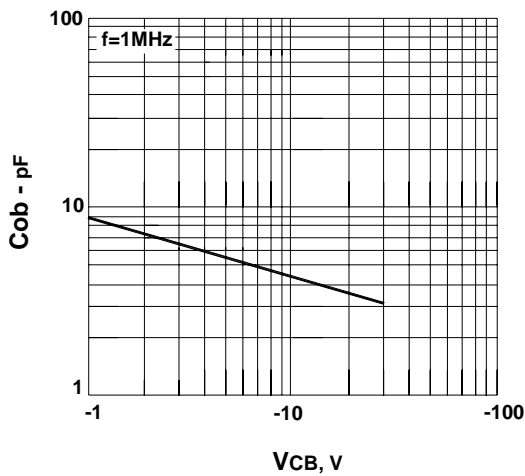
Normalized h-parameters vs. collector emitter voltage



Normalized h-parameters vs. emitter current



C_{ob} - V_{CB}



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