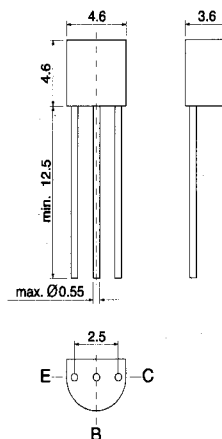


PNP Silicon Expitaxial Planar Transistor

for switching and amplifier applications. Especially suitable for AF-driver stages and low power output stages.

The transistor is subdivided into two groups, G and H, according to its DC current gain. As complementary type the NPN transistor HN 9013 is recommended.

On special request, these transistors can be manufactured in different pin configurations. Please refer to the "TO-92 TRANSISTOR PACKAGE OUTLINE" on page 80 for the available pin options.



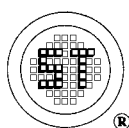
TO-92 Plastic Package
Weight approx. 0.18 g
Dimensions in mm

Absolute Maximum Ratings

	Symbol	Value	Unit
Collector Emitter Voltage	$-V_{CEO}$	30	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	800	mA
Peak Collector Current	$-I_{CM}$	1	A
Base Current	$-I_B$	100	mA
Power Dissipation at $T_{amb} = 25\text{ }^{\circ}\text{C}$	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

G S P FORM A AVAILABLE

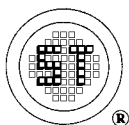


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Characteristics at $T_{amb} = 25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\text{ V}$, $-I_C = 50\text{ mA}$ Current Gain Group G H	h_{FE} h_{FE} h_{FE}	110 177 40	- - -	183 250 -	- - -
Collector Cutoff Current at $-V_{CB} = 31\text{ V}$	$-I_{CBO}$	-	-	100	nA
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	30	-	-	V
Emitter Base Cutoff Current at $-V_{EB} = 5.1\text{ V}$	$-I_{EBO}$	-	-	100	nA
Collector Saturation Voltage at $-I_C = 500\text{ mA}$, $-I_B = 20\text{ mA}$	$-V_{CEsat}$	-	-	0.7	V
Base Saturation Voltage at $-I_C = 500\text{ mA}$, $-I_B = 20\text{ mA}$	$-V_{BEsat}$	-	-	1.2	V
Base Emitter Voltage at $-V_{CE} = 1\text{ V}$, $-I_C = 50\text{ mA}$	$-V_{BE}$	0.6	-	0.75	V
Gain Bandwidth Product at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$, $f = 50\text{ MHz}$	f_T	-	100	-	MHz
Collector Base Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{CBO}	-	12	-	pF
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					

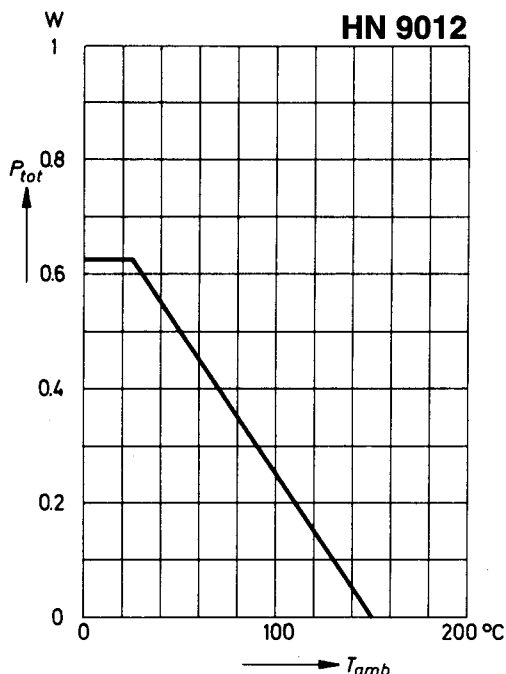
G S P FORM A AVAILABLE

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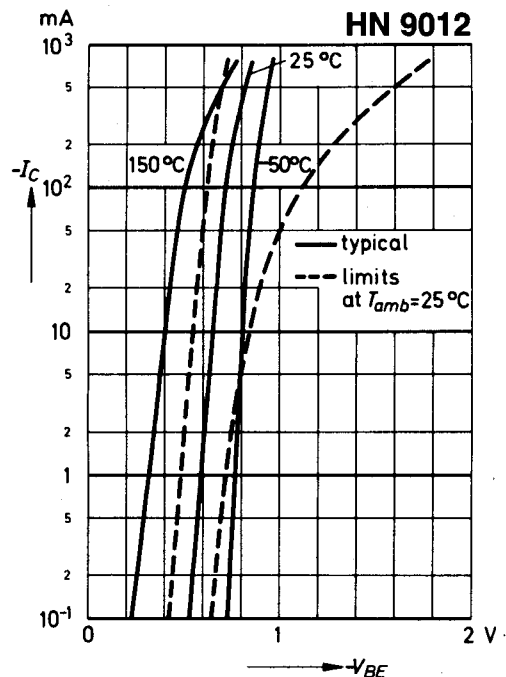


Admissible power dissipation versus ambient temperature

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

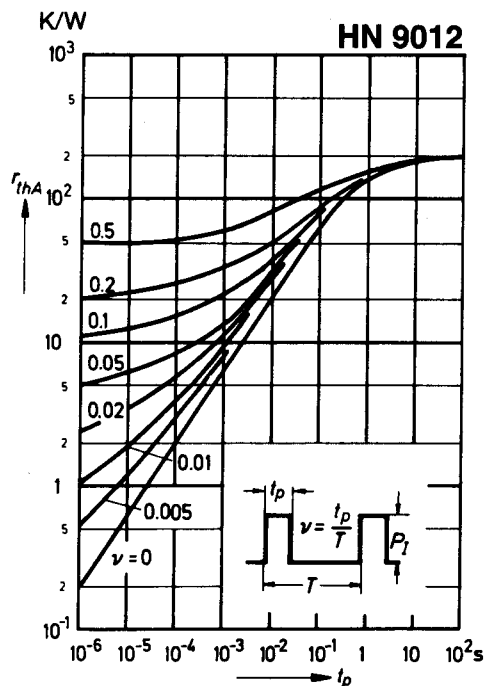


Collector current versus base emitter voltage

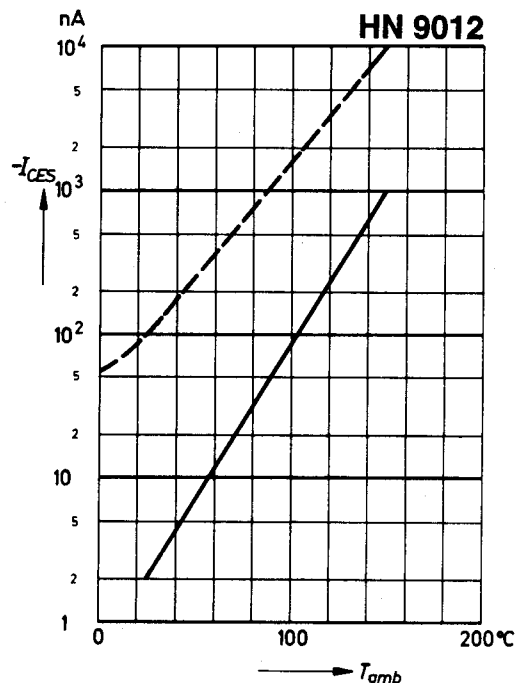
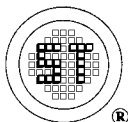


Pulse thermal resistance versus pulse duration

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



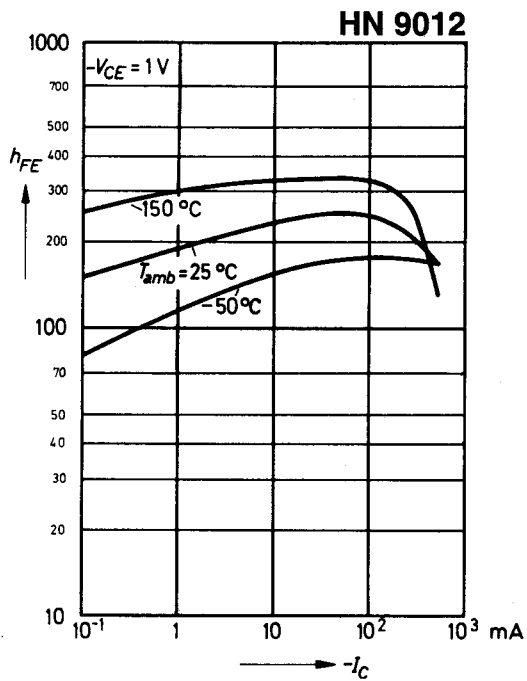
Collector cutoff current versus ambient temperature



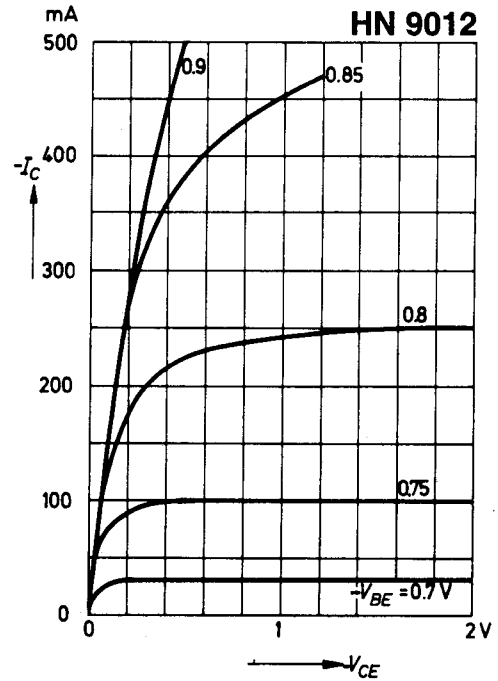
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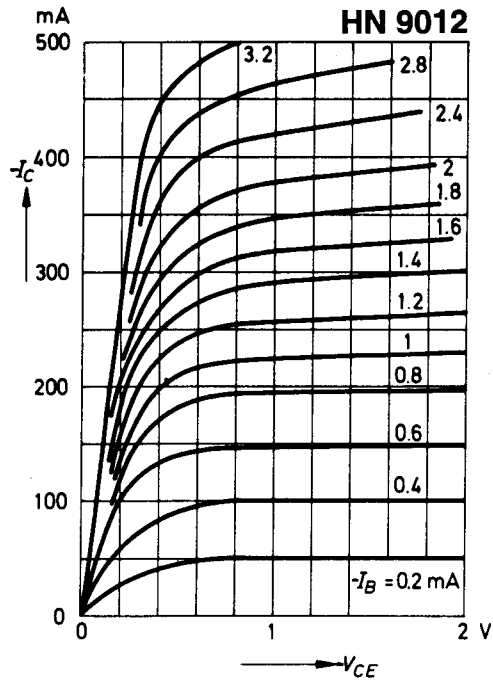
DC current gain
versus collector current



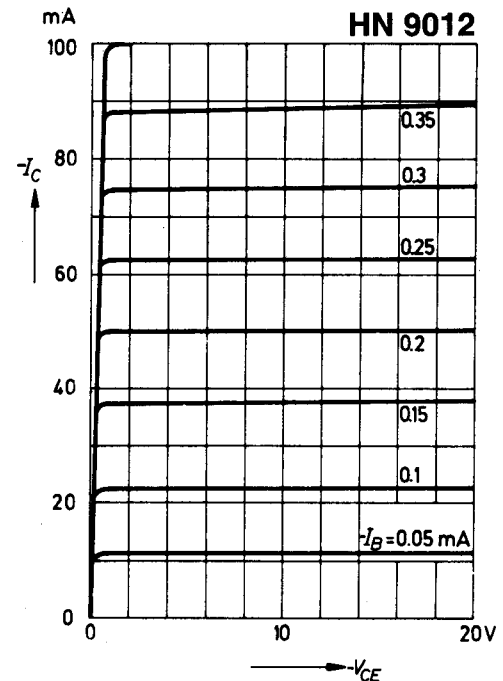
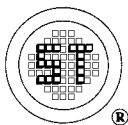
Common emitter collector
characteristics



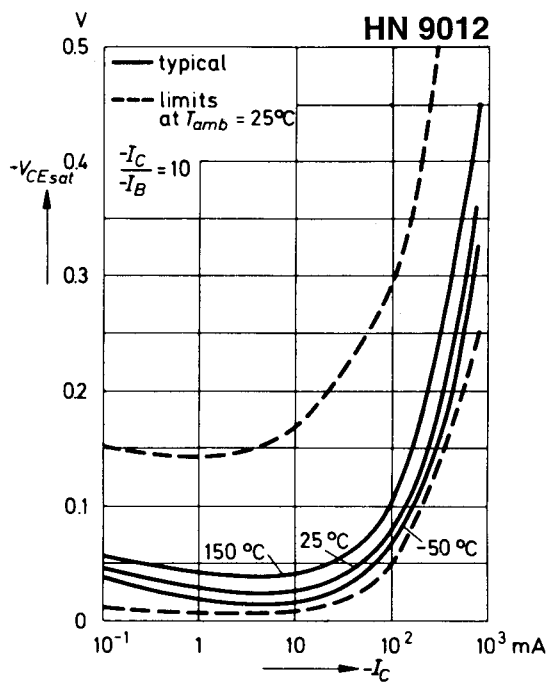
Common emitter collector
characteristics



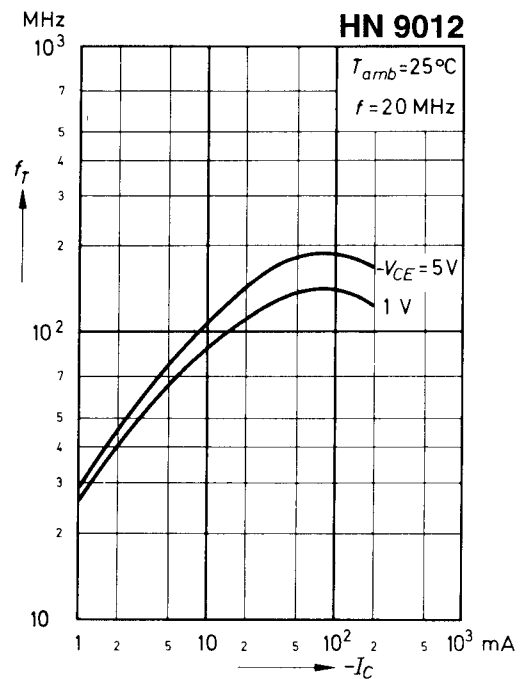
Common emitter collector
characteristics



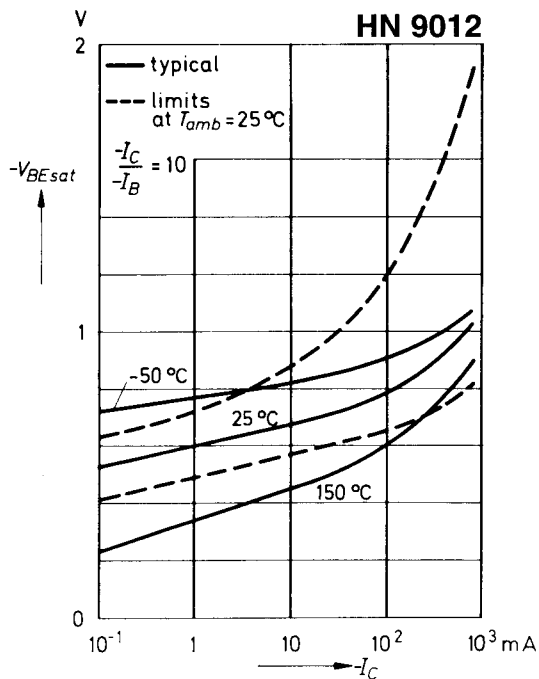
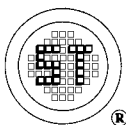
Collector saturation voltage
versus collector current



Gain bandwidth product
versus collector current



Base saturation voltage
versus collector current



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