Elektronische Bauelemente

2SA812K

-50 V, -100 mA

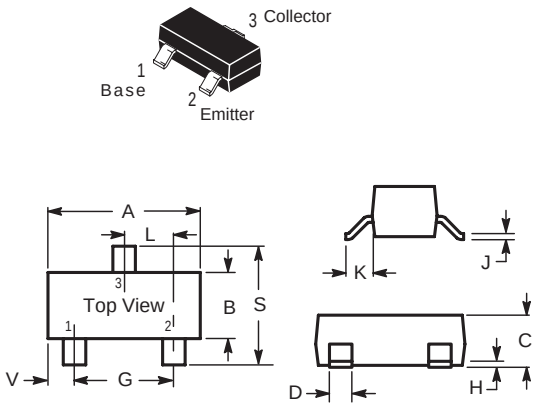
PNP Epitaxial Planar Transistor

RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

FEATURES

- **Complementary to 2SC1623K**
- **High DC Current Gain: h_{FE} = 200 TYP. (V_{CE} = -6V, I_C = -1mA)**
- **High Voltage: V_{CEO} = -50V**

PACKAGE DIMENSIONS



SOT-23		
Dim	**Min**	**Max**
A	2.800	3.040
B	1.200	1.400
C	0.890	1.110
D	0.370	0.500
G	1.780	2.040
H	0.013	0.100
J	0.085	0.177
K	0.450	0.600
L	0.890	1.020
S	2.100	2.500
V	0.450	0.600
All Dimension in mm		

ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-50	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Currrent	I_C	-100	mA
Total Power Dissipation	Pc	200	mW
Junction, Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	℃

CHARACTERISTICS at Ta = 25°C

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-60	-	-	V	I_C=-100uA
BVCEO	-50	-	-	V	I_C=-1mA
BVEBO	-5	-	-	V	I_E=-100uA
I_{CBO}	-	-	-100	nA	V_{CB}=-60V
I_{EBO}	-	-	-100	nA	V_{EB}=-5V
*$V_{CE(sat)}$	-	-	300	mV	I_C=100mA, I_B=10mA
V_{BE}	-0.58	-	-0.68	V	I_C = -1mA, V_{CE} = -6V
h_{FE}	90	-	600		V_{CE}=-6V, I_C=-1mA
f_T	-	180	-	MHz	V_{CE}=-6V, I_C=-10mA
C_{ob}	-	4.5	-	pF	V_{CB} = -10V, f = 1 MHz

CLASSIFICATION OF h_{FE}

Rank	P	Y	G	B
Range	90 - 180	135 - 270	200 - 400	300 - 600
Marking	M4	M5	M6	M7

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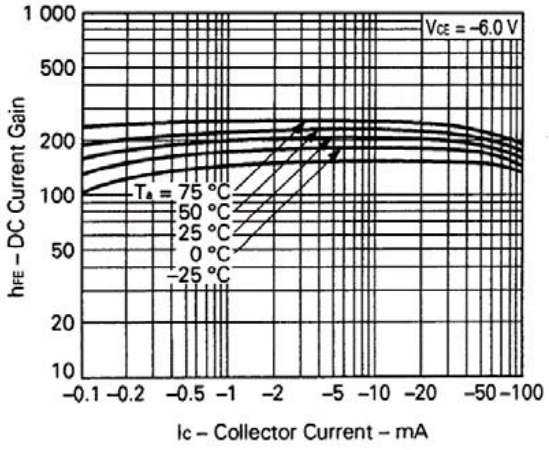
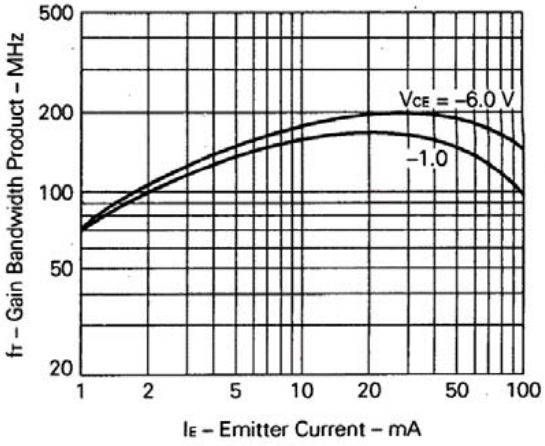
CHARACTERISTIC CURVES

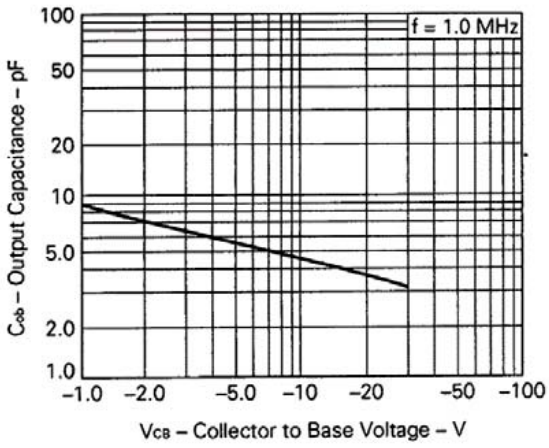
DC CURRENT GAIN vs. COLLECTOR CURRENT



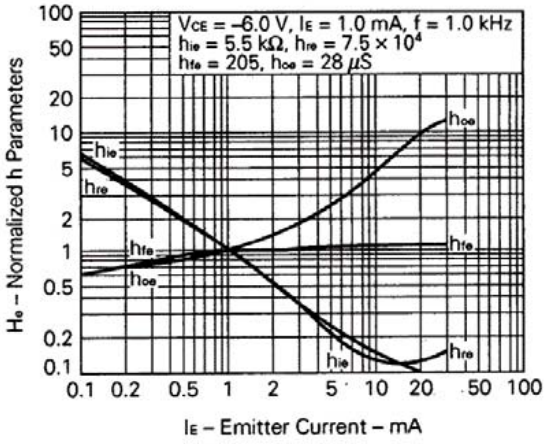
GAIN BANDWIDTH PRODUCT vs. EMITTER CURRENT



OUTPUT CAPACITANCE vs. REVERSE VOLTAGE



NORMALIZED h PARAMETER vs. EMITTER CURRENT



NORMALIZED h PARAMETER vs. COLLECTOR TO EMITTER VOLTAGE