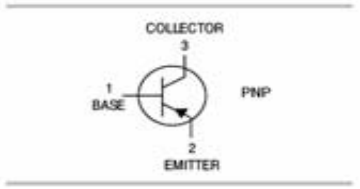
PNP Silicon Epitaxial Planar Transistor **2SA1611**

FEATURES

- High voltage V_{CEO}=-50V.
- Excellent H_{FE} Linearity.
- High DC current gain : h_{FE}=200 typ.
- Complementary to 2SC4177.

Lead-free





SOT-323

APPLICATIONS

- Audio frequency general purpose amplifier applications.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1611	M4/M5/M6/M7	SOT-323

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-100	mA
P_C	Collector Dissipation	150	mW
T_j,T_{stg}	Junction and Storage Temperature	-55~150	℃

PNP Silicon Epitaxial Planar Transistor **2SA1611**

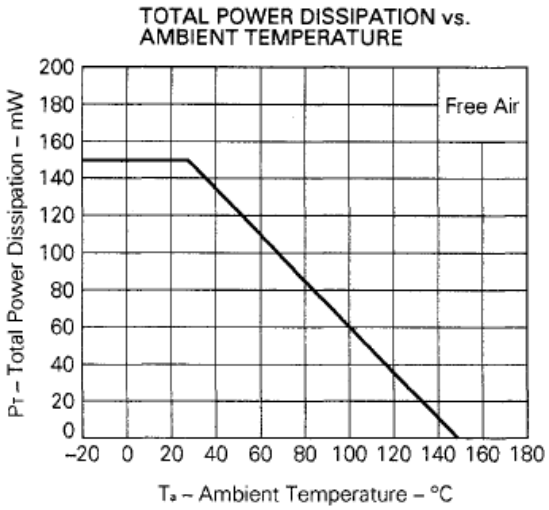
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

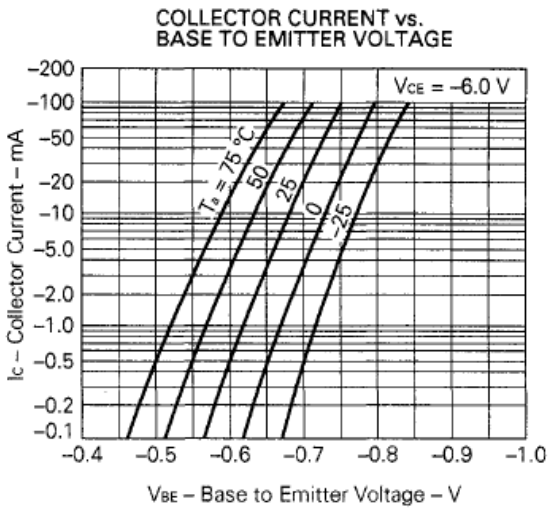
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-60V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-6V,I_C=-1mA	90	200	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA		-0.18	-0.3	V
Transition frequency	f_T	V_{CE}=-6V, I_C= -10mA	180			MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz		4.5		pF

CLASSIFICANTION OF h_{FE}

Range	90-180	135-270	200-400	300-600
marking	M4	M5	M6	M7

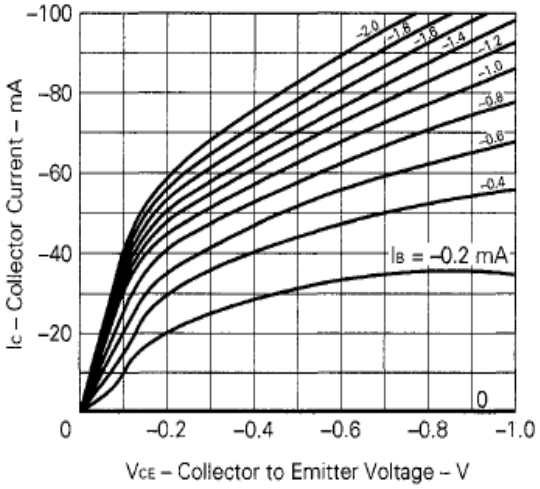
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified



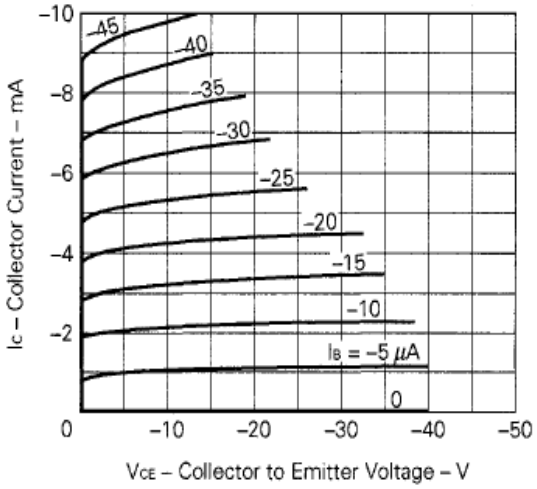


PNP Silicon Epitaxial Planar Transistor **2SA1611**

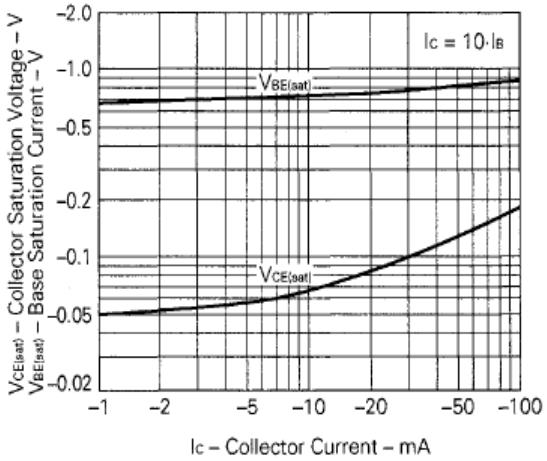
COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE



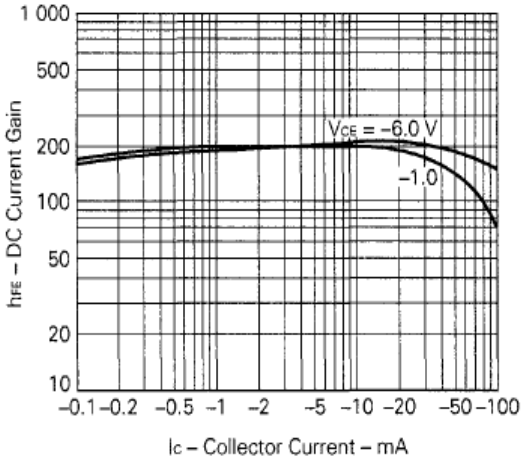
COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE



BASE AND COLLECTOR
SATURATION VOLTAGE vs.
COLLECTOR CURRENT



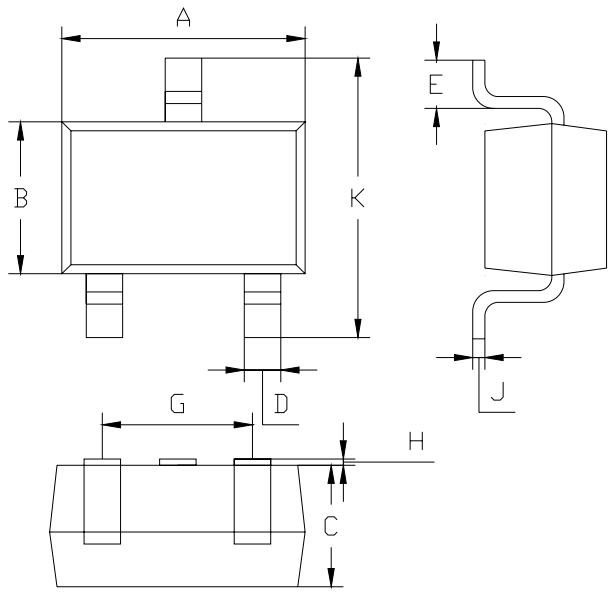
DC CURRENT GAIN vs.
COLLECTOR CURRENT



PNP Silicon Epitaxial Planar Transistor **2SA1611**

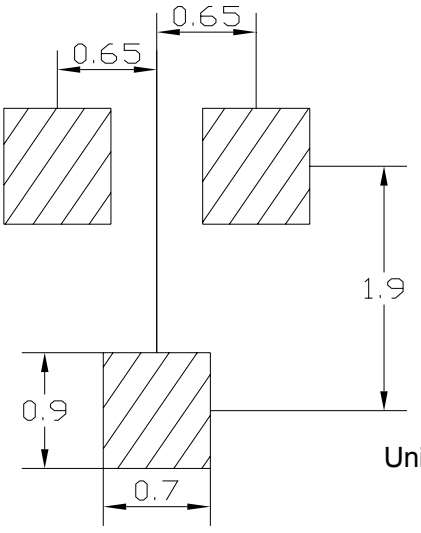
PACKAGE OUTLINE

Plastic surface mounted package SOT-323



SOT-323		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1.0Typical	
D	0.15	0.35
E	0.25	0.40
G	1.2	1.4
H	0.02	0.1
J	0.1Typical	
K	2.1	2.3
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
2SA1611	SOT-323	3000/Tape&Reel