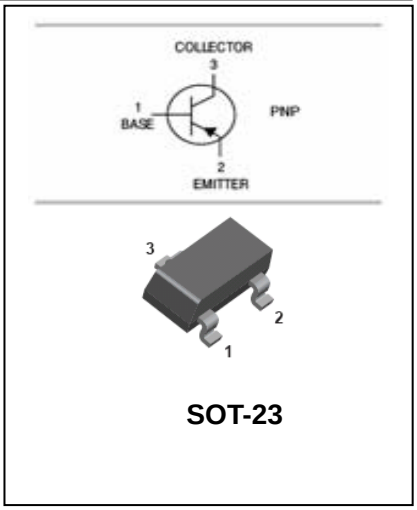
Silicon Epitaxial Planar Transistor **2SA733**

FEATURES

Lead-free

- Excellent h_{FE} Linearity.
- Power dissipation：P_D=250mW.
- High h_{FE}.



SOT-23

APPLICATIONS

- Designed for use in driver stage of amplifier.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SA733	CS	SOT-23

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	-150	mA
P_C	Collector Dissipation	250	mW
T_j,T_{stg}	Junction and Storage Temperature	-55~150	℃

Silicon Epitaxial Planar Transistor **2SA733**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

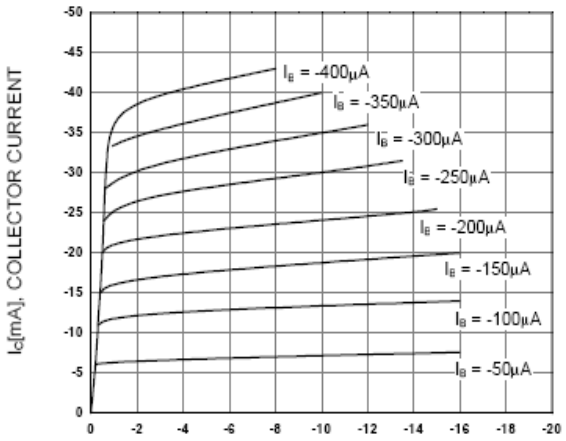
Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-50μA,I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-50μA,I_C=0	-5			V
Collector cut-off 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	120		475	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA		-0.18	-0.3	V
Base-emitter on voltage	V_{BE}	V_{CE}=-6V, I_C= -1.0mA	-0.50	-0.62	-0.80	V
Transition frequency	f_T	V_{CE}=-6V, I_C= -10mA	50	180		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E= 0 f=1MHz		2.8		pF
Noise figure	NF	V_{CE}=-6V, I_C= -0.3mA f=100Hz		6	20	dB

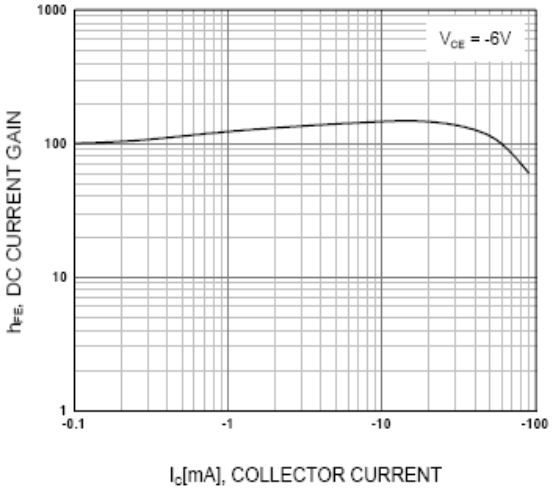
CLASSIFICATION OF $h_{FE(1)}$

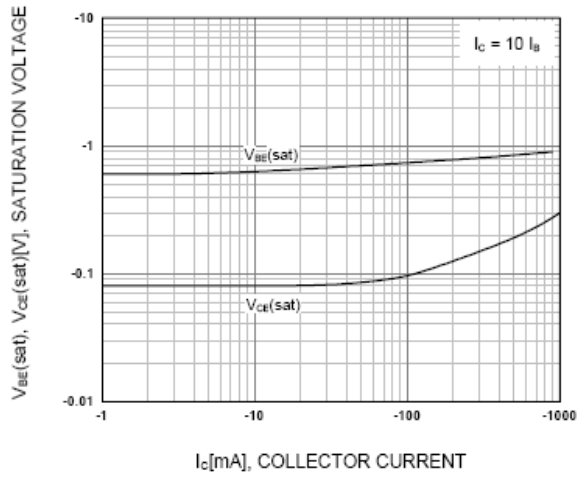
Rank	**L**	**H**
Range	120-200	200-475

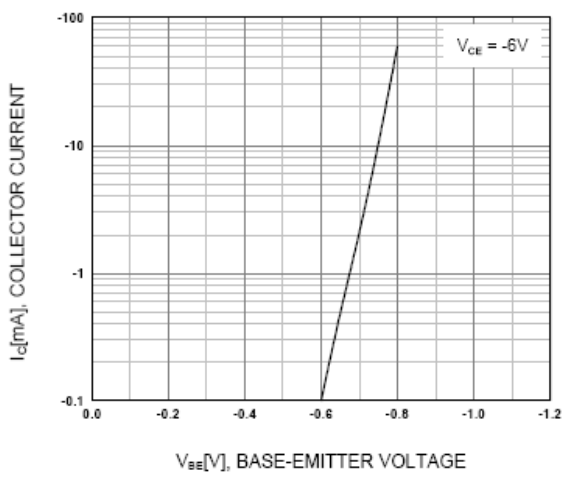
Silicon Epitaxial Planar Transistor **2SA733**

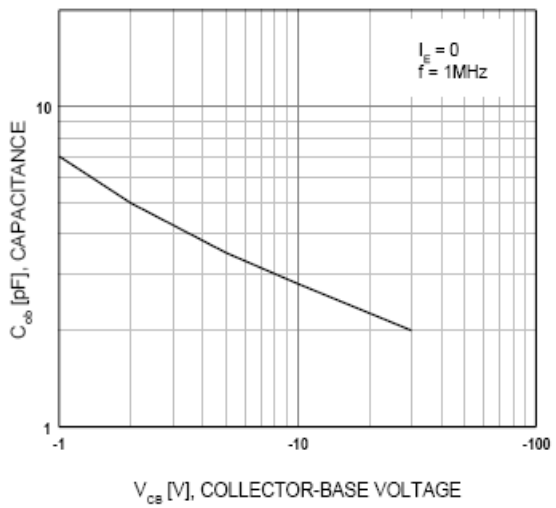
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

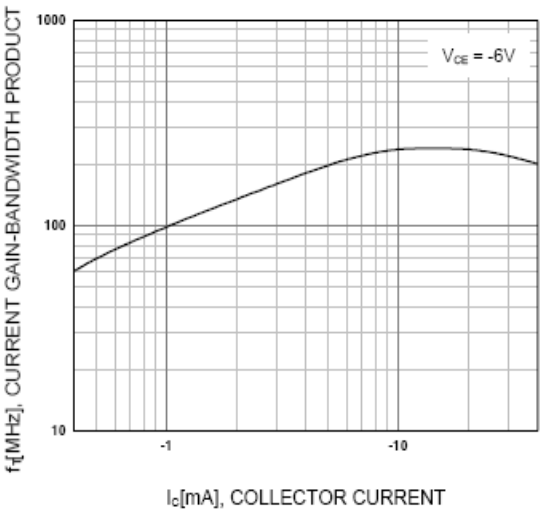








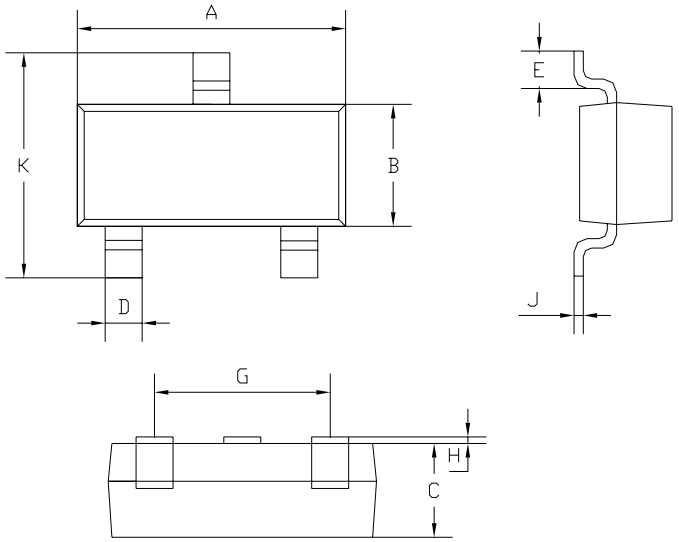




Silicon Epitaxial Planar Transistor **2SA733**

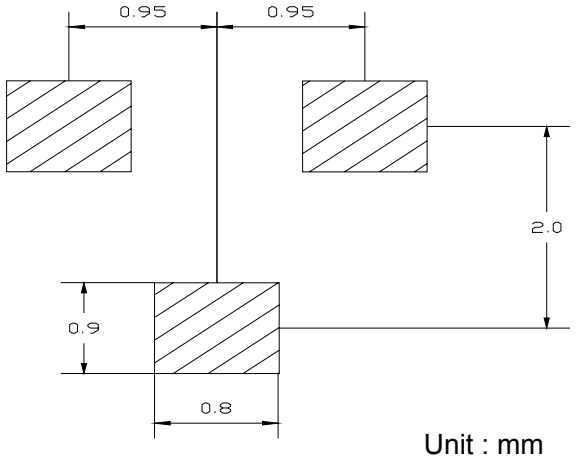
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
2SA733	SOT-23	3000/Tape&Reel