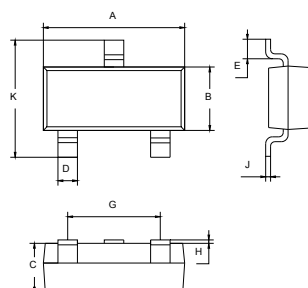
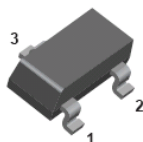


FEATURES

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

APPLICATIONS

- Designed for use in driver stage of amplifier.



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	Ty1.0 pical	
D	Ty0.4 pical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	Ty0.1 pical	
K	2.20	2.60
All Dimensions in mm		

ORDERING INFORMATION

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

MAXIMUM RATING @ $T_a=25^{\circ}C$ unless otherwise specified

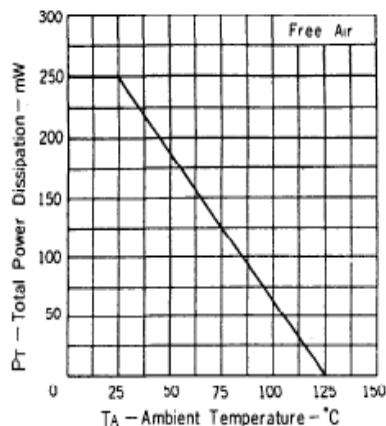
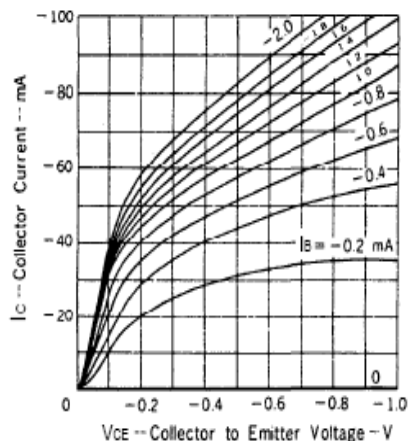
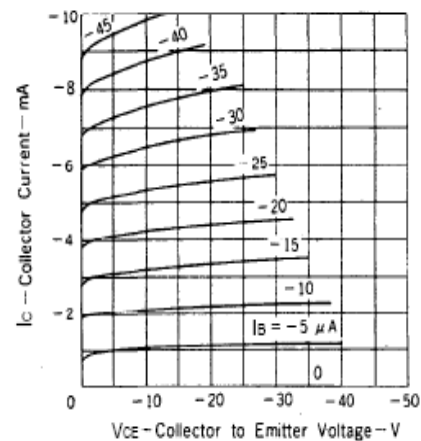
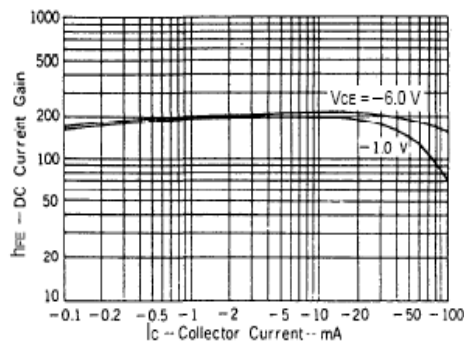
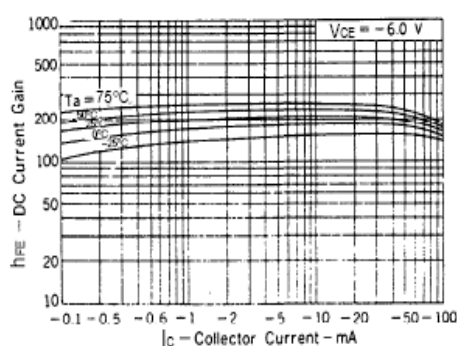
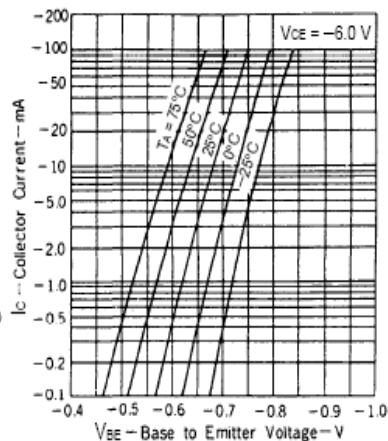
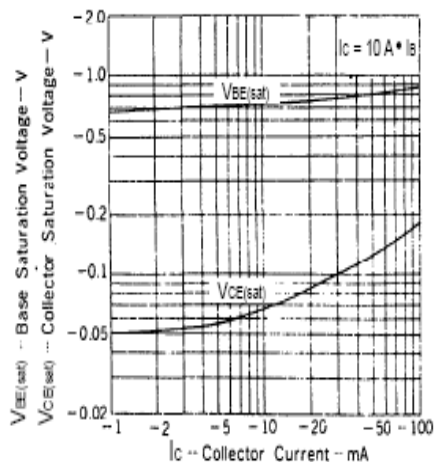
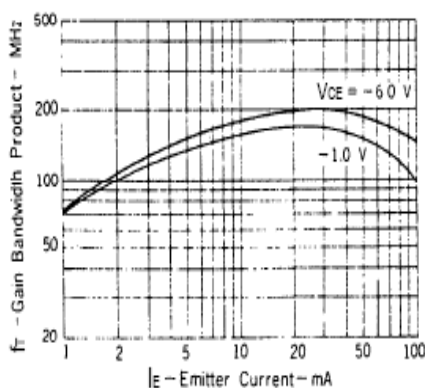
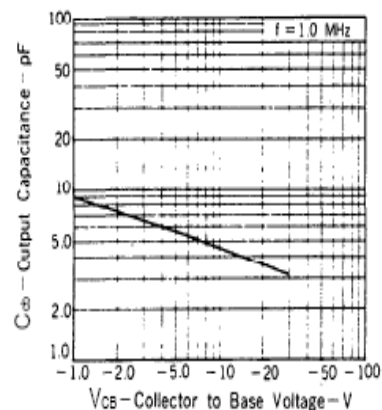
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-100	mA
P_C	Collector Dissipation	250	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	$^{\circ}C$

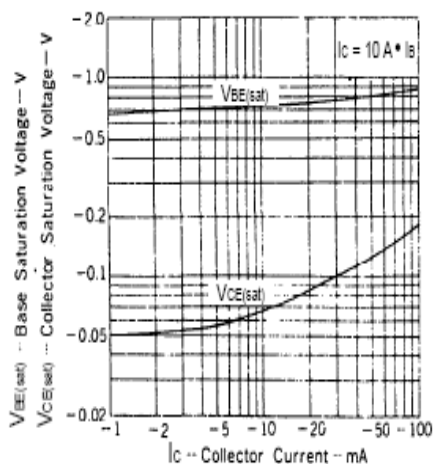
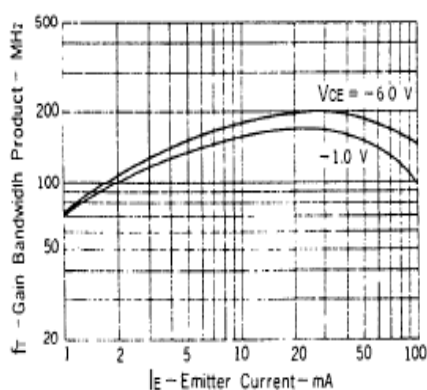
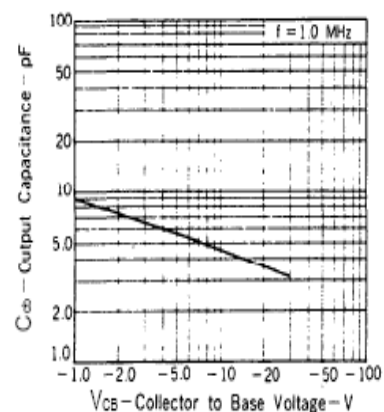
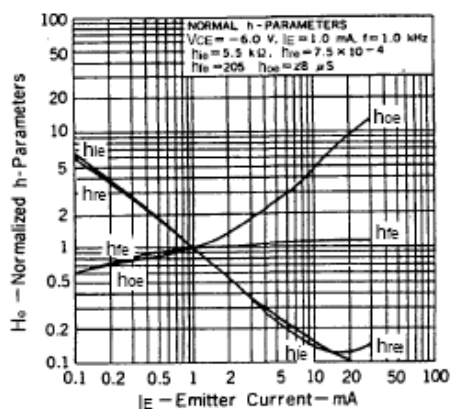
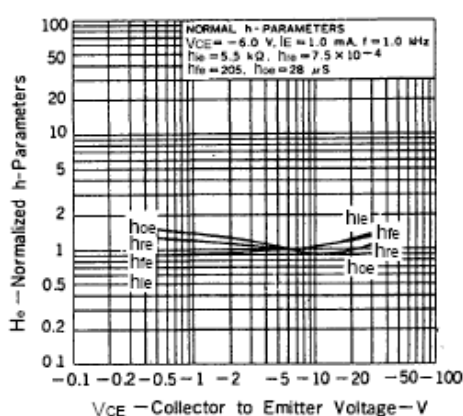
ELECTRICAL CHARACTERISTICS @ $T_a=25^{\circ}C$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-50\mu A, I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-50\mu A, I_C=0$	-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
Base-emitter on voltage	V_{BE}	$V_{CE}=-6V, I_C=-1.0mA$	-0.58	-0.62	-0.68	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

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	Q	P	E
Range	90-180	135-270	200-400	300-600

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified
**TOTAL POWER DISSIPATION
vs. AMBIENT TEMPERATURE**

**COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE**

**COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE**

**DC CURRENT GAIN
vs. COLLECTOR CURRENT**

**DC CURRENT GAIN
vs. COLLECTOR CURRENT**

**COLLECTOR CURRENT vs.
BASE TO EMITTER VOLTAGE**

**COLLECTOR AND BASE SATURATION
VOLTAGE vs. COLLECTOR CURRENT**

**GAIN BANDWIDTH PRODUCT
vs. EMITTER CURRENT**

**OUTPUT CAPACITANCE
vs. REVERSE VOLTAGE**


COLLECTOR AND BASE SATURATION VOLTAGE vs. COLLECTOR CURRENT

GAIN BANDWIDTH PRODUCT vs. EMITTER CURRENT

OUTPUT CAPACITANCE vs. REVERSE VOLTAGE

NORMALIZED h-PARAMETERS vs. EMITTER CURRENT

NORMALIZED h-PARAMETERS vs. COLLECTOR TO EMITTER VOLTAGE


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