

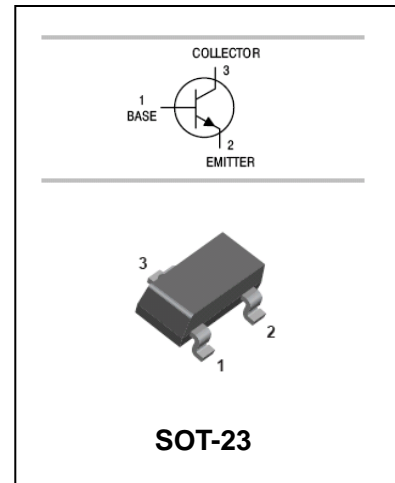


FEATURES

- Low saturation voltage
- Excellent h_{FE} linearity and high h_{FE}
- High collector dissipation

APPLICATIONS

- AUDIO frequency general purpose amplifier application



ORDERING INFORMATION

Type No.	Marking	Package Code
D882	D882	SOT-23

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Dissipation	350	mW
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	$^{\circ}\text{C}$


ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$			1	μA
DC current gain	h_{FE}	$V_{CE}=2V, I_C=1A$	60	160	400	
		$V_{CE}=2V, I_C=20mA$	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=2A, I_B=0.2A$		0.3	0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=2A, I_B=0.2A$		1.0	2	V
Transition frequency	f_T	$V_{CE}=5V, I_C=0.1A$		90		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	P	E
Range	60-120	100-200	160-320	200-400



TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

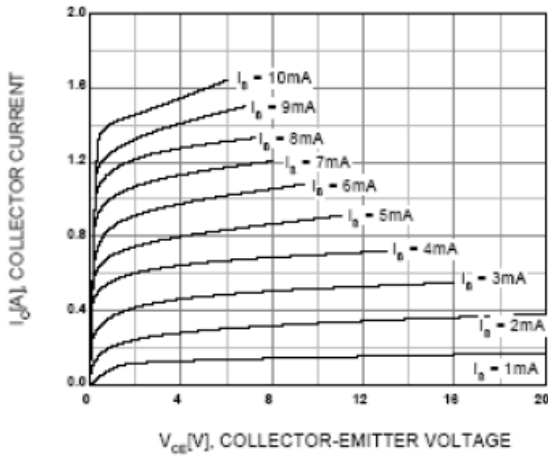


Figure 1. Static Characteristic

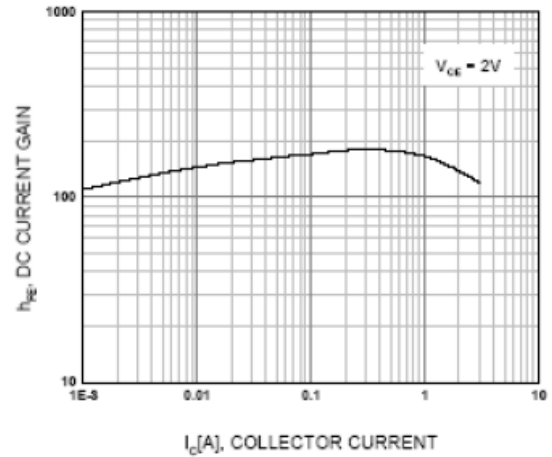


Figure 2. DC current Gain

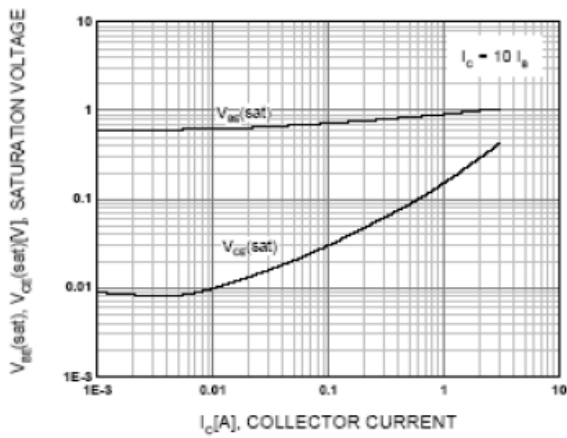


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

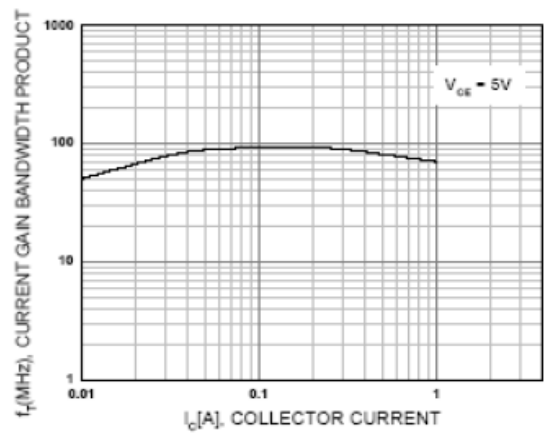


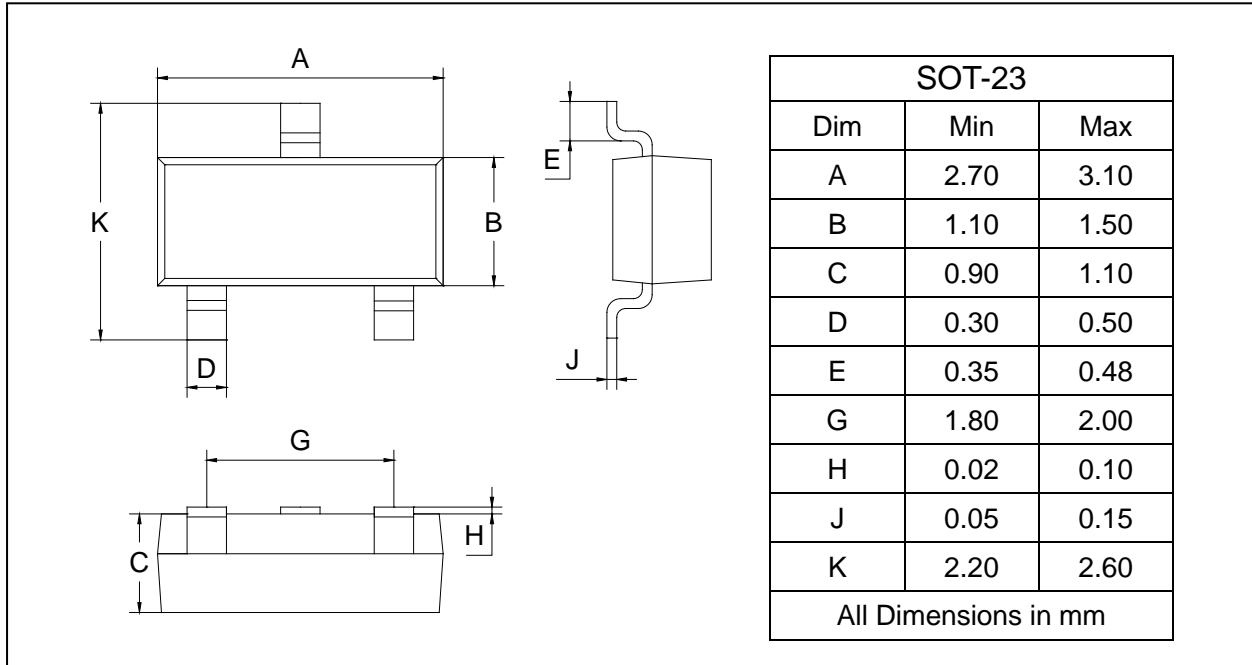
Figure 4. Current Gain Bandwidth Product



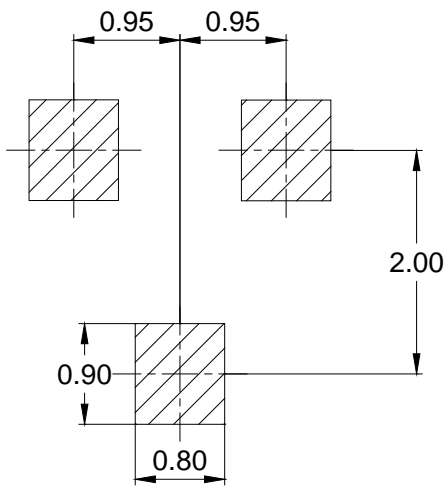
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT-23	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220