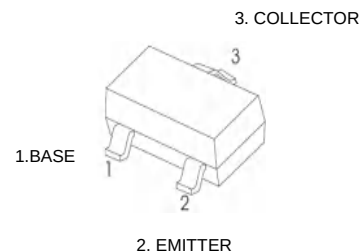




2SC2712 Plastic-Encapsulate Transistors

FEATURE

- Audio Frequency General Purpose Amplifier Applications
- Low Noise: NF=1 dB (Typ),10dB(MAX)
- Complementary to 2SA1162



SOT-23

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
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 Power Dissipation	150	mW
T_{J}	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

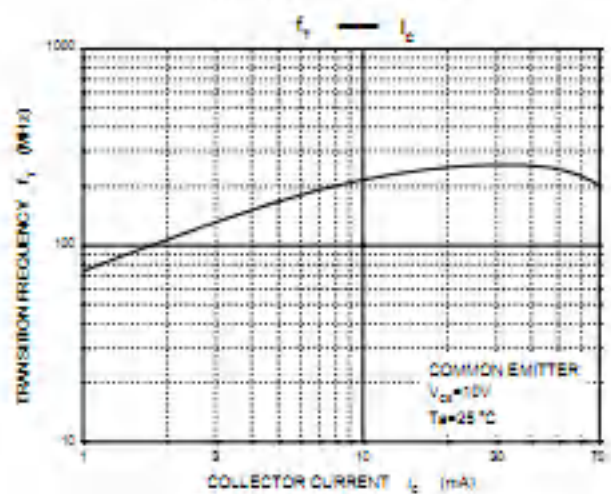
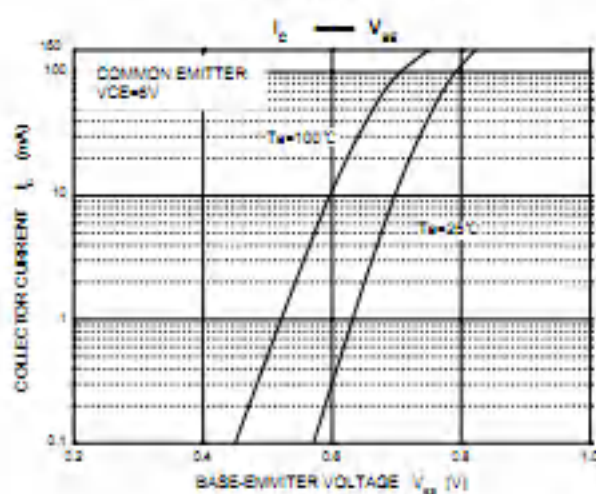
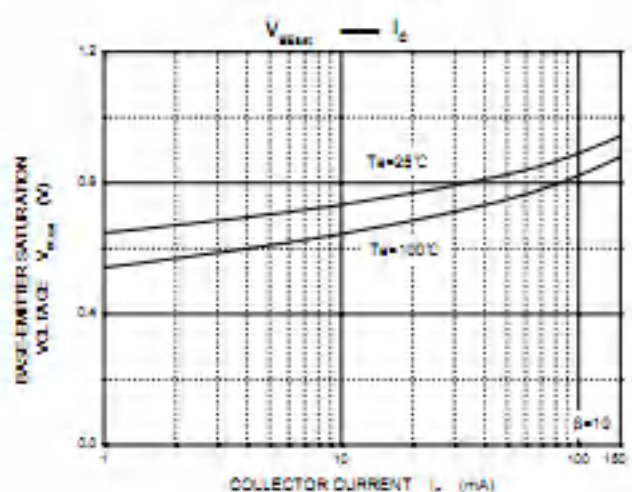
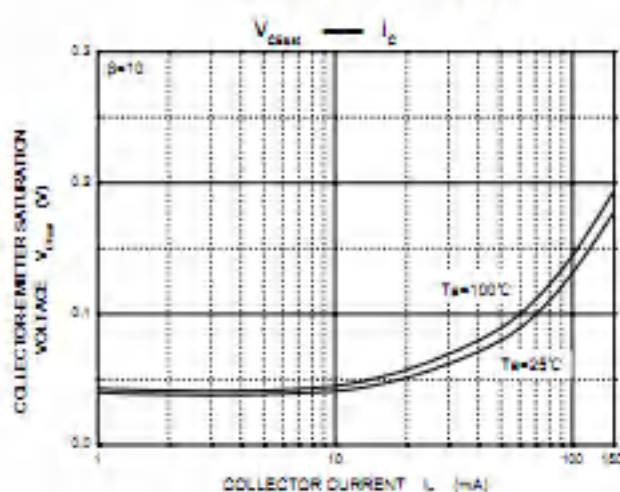
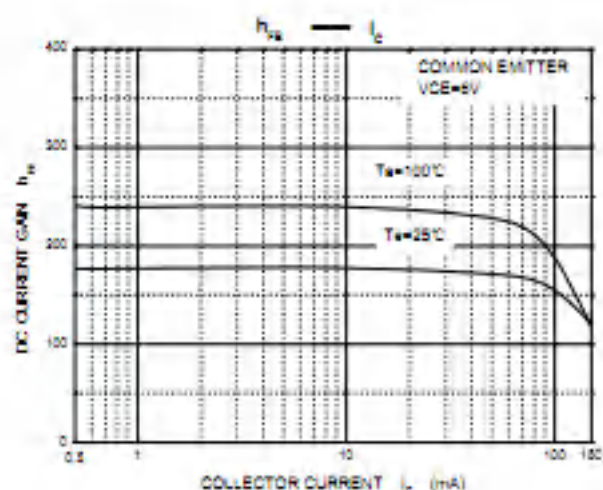
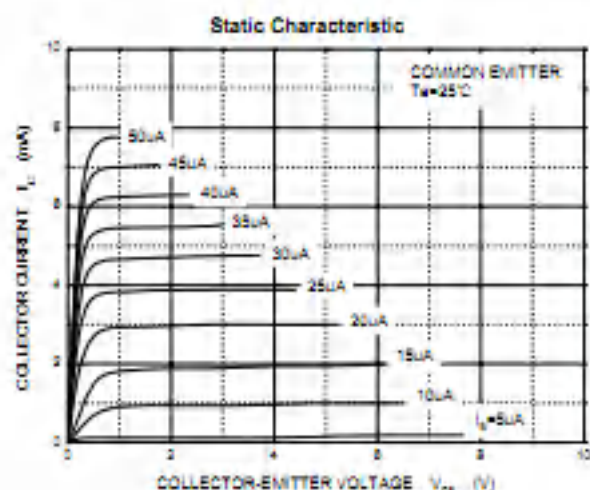
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=100\mu\text{A}$, $I_{\text{E}}=0$	60			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}}=1\text{mA}$, $I_{\text{B}}=0$	50			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=100\mu\text{A}$, $I_{\text{C}}=0$	5			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=60\text{V}$, $I_{\text{E}}=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}}=5\text{V}$, $I_{\text{C}}=0$			0.1	μA
DC current gain	h_{FE}	$V_{\text{CE}}=6\text{V}$, $I_{\text{C}}=2\text{mA}$	70		700	
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}}=100\text{mA}$, $I_{\text{B}}=10\text{mA}$		0.1	0.25	V
Transition frequency	f_{T}	$V_{\text{CE}}=10\text{V}$, $I_{\text{C}}=1\text{mA}$	80			MHz
Output capacitance	C_{ob}	$V_{\text{CB}}=10\text{V}$, $I_{\text{E}}=0$, $f=1\text{MHz}$		2.0	3.5	pF
Noise Figure	NF	$V_{\text{CE}}=6\text{V}$, $I_{\text{C}}=0.1\text{mA}$, $f=1\text{kHz}$, $R_{\text{g}}=10\text{k}\Omega$		1.0	10	dB

CLASSIFICATION OF h_{FE}

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700
Marking	LO	LY	LG	LL



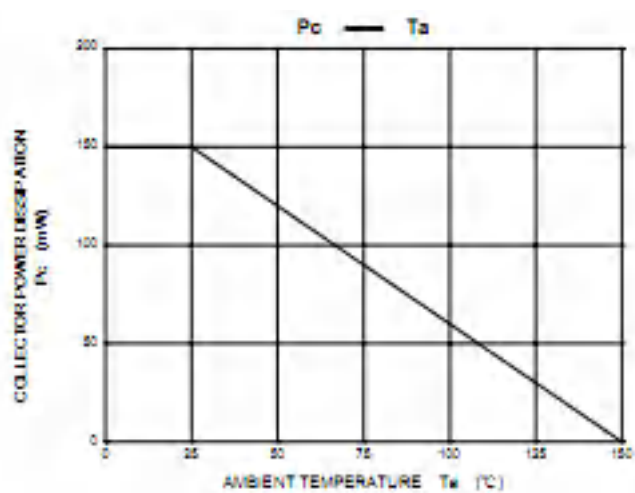
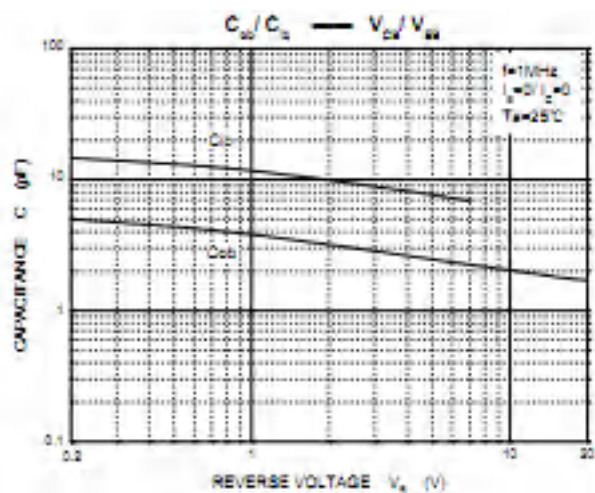
Typical Characteristics





迈拓电子

MAITUO ELECTRONIC

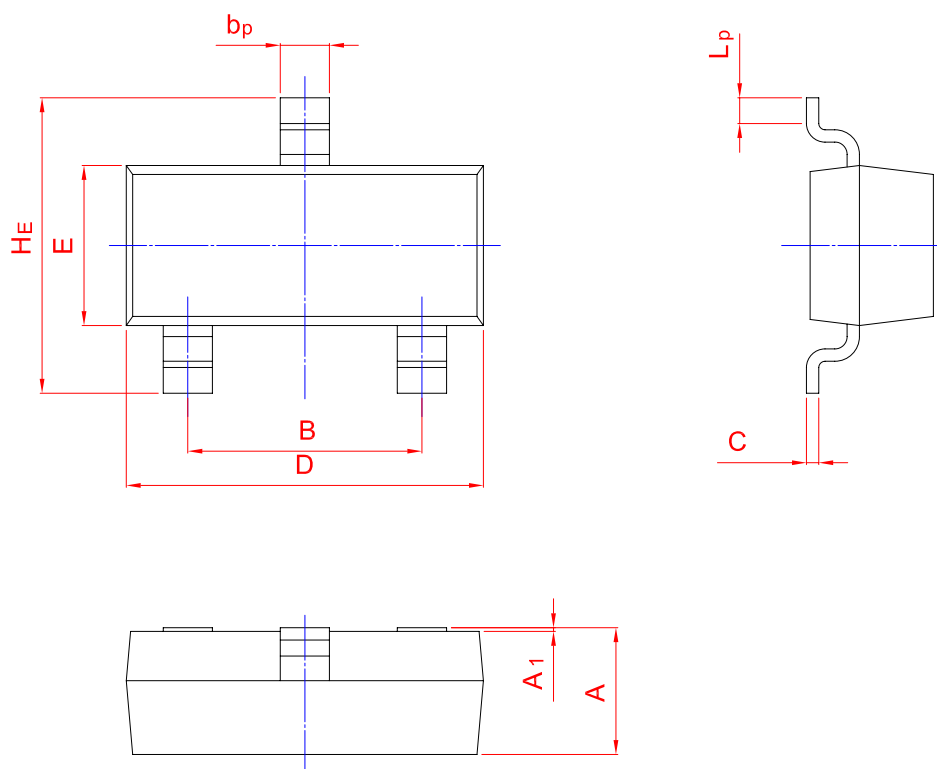
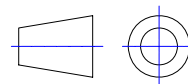




PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20