

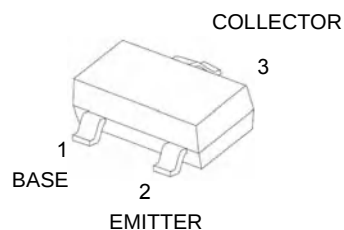


2SA1 162 TRANSISTOR (PNP)

FEATURES

- Low noise
- Complementary to 2SC2712
- Small Package

MARKING: SO , SY , SG



SOT-23

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_{C}	Collector Current	-150	mA
P_{C}	Collector Power Dissipation	150	mW
$R_{\theta\text{JA}}$	Thermal Resistance From Junction To Ambient	833	$^{\circ}\text{C/W}$
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	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=-100\mu\text{A}, I_{\text{E}}=0$	-50			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}	$V_{\text{CB}}=-50\text{V}, I_{\text{E}}=0$			-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		400	
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}}=-100\text{mA}, I_{\text{B}}=-10\text{mA}$			-0.3	V
Transition frequency	f_{T}	$V_{\text{CE}}=-10\text{V}, I_{\text{C}}=-1\text{mA}$	80			MHz
Collector output capacitance	C_{ob}	$V_{\text{CB}}=-10\text{V}, I_{\text{E}}=0, f=1\text{MHz}$			7	pF
Noise figure	NF	$V_{\text{CE}}=-6\text{V}, I_{\text{C}}=0.1\text{mA}, f=1\text{KHz}, R_{\text{g}}=10\text{K}\Omega$			10	dB

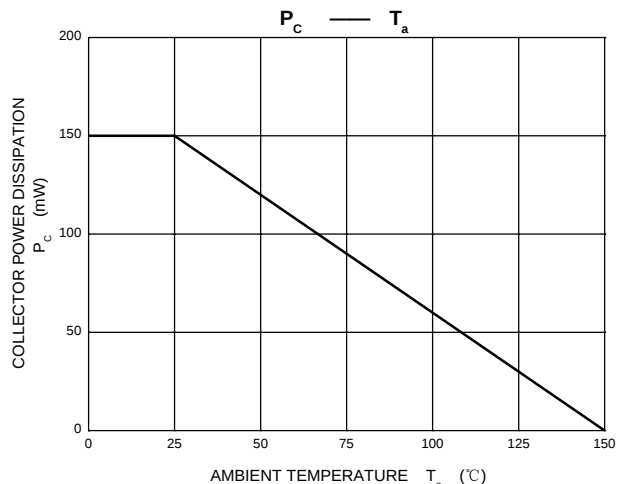
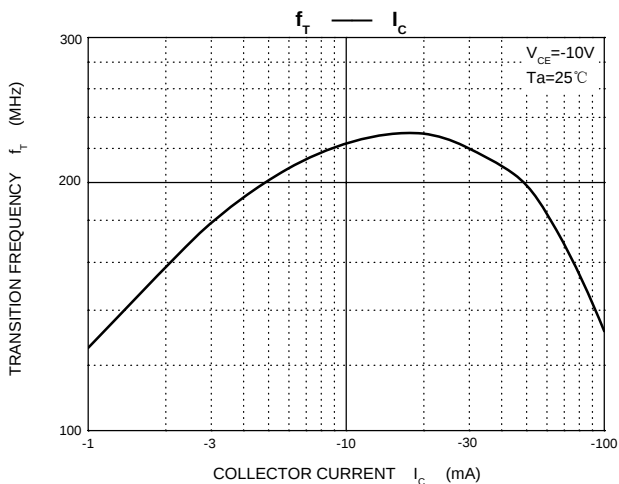
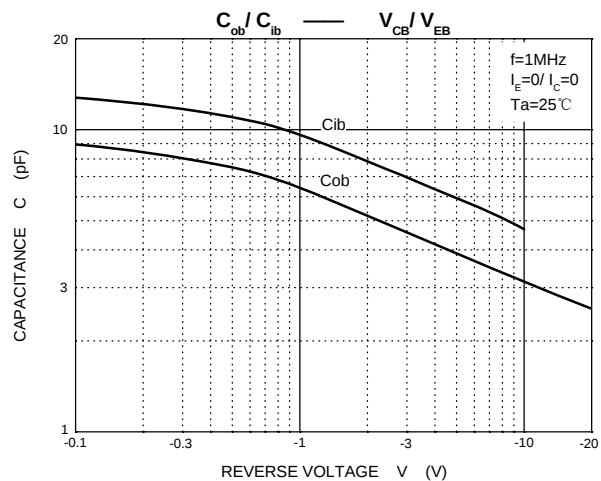
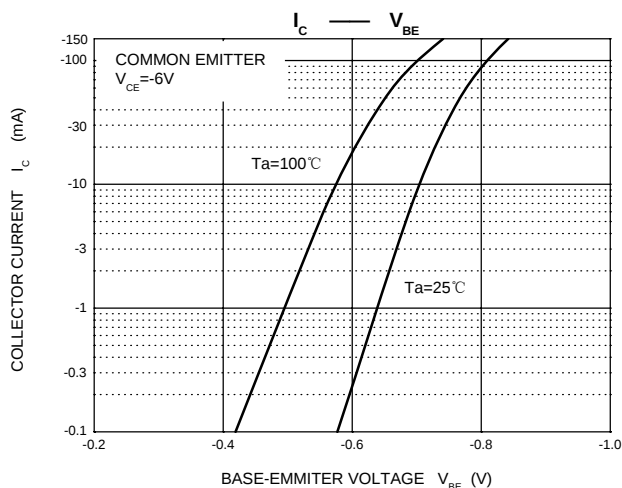
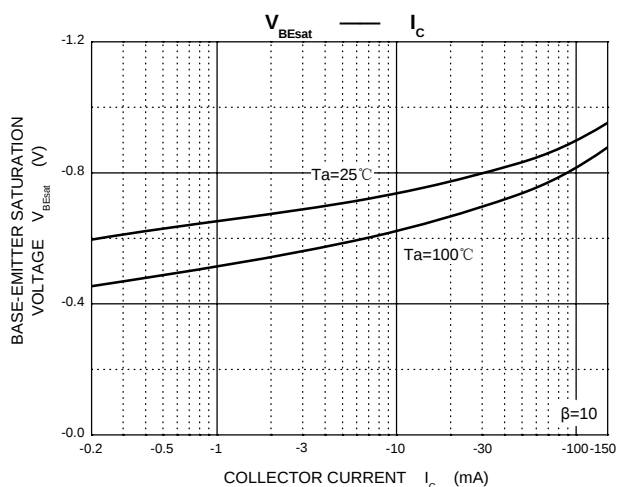
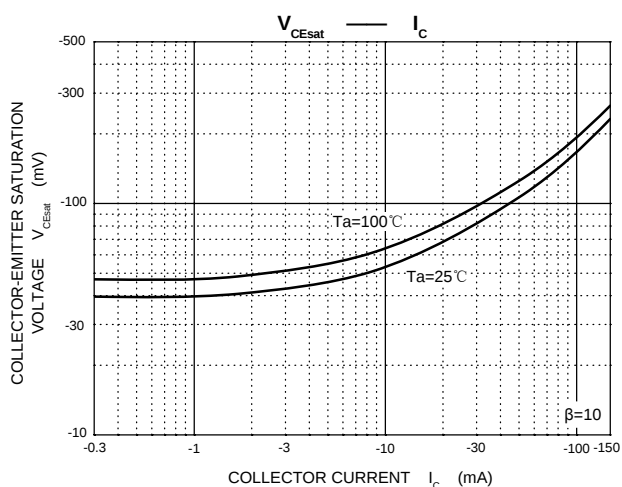
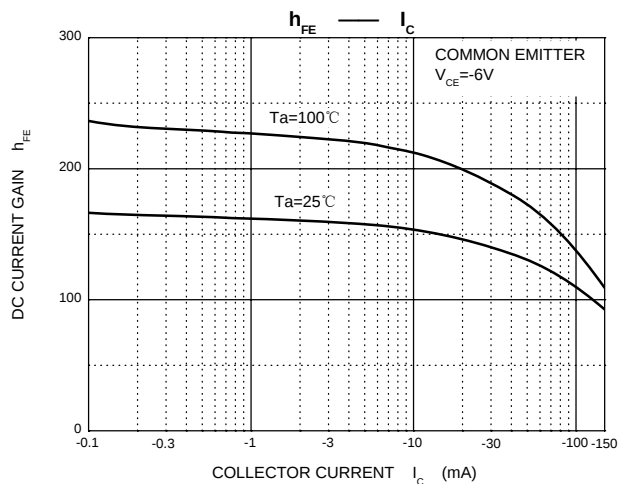
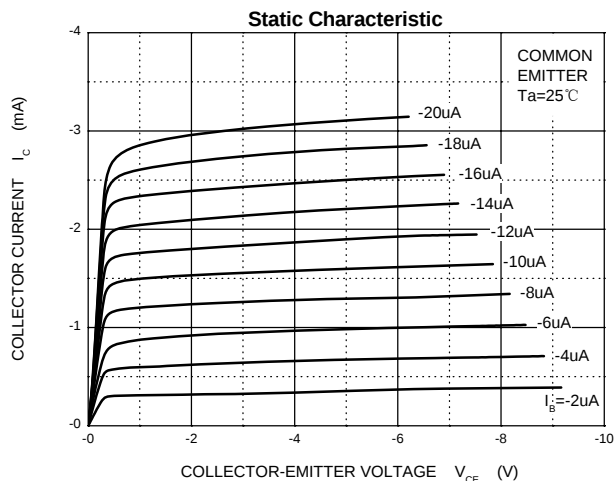
CLASSIFICATION OF h_{FE}

Rank	O	Y	GR(G)
Range	70-140	120-240	200-400



迈拓电子

MAITUO ELECTRONIC

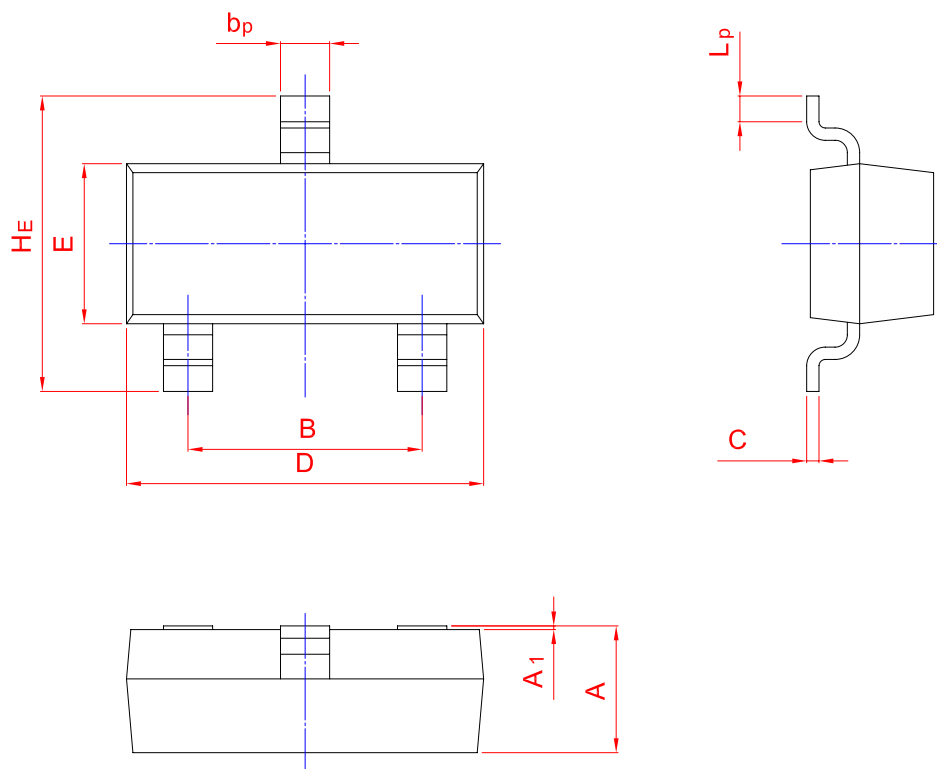
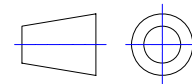




PACKAGE OUTLINE

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