



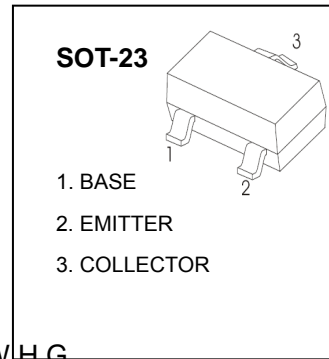
**SOT-23 Plastic-Encapsulate Transistors**

**2SC2412** TRANSISTOR (NPN)

**FEATURES**

- Low  $C_{ob}$ ,  $C_{ob} = 2.0 \text{ pF (Typ)}$ .

**MARKING : BQ, BR, BS**



0\$;,0805\$7,1\*6 7 / XQOHVV RWKHUZLVH QRWHG

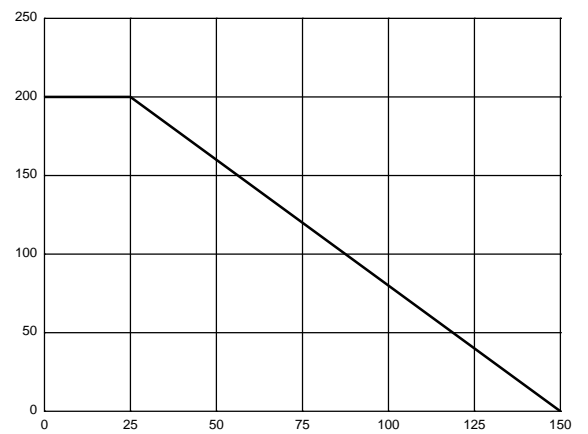
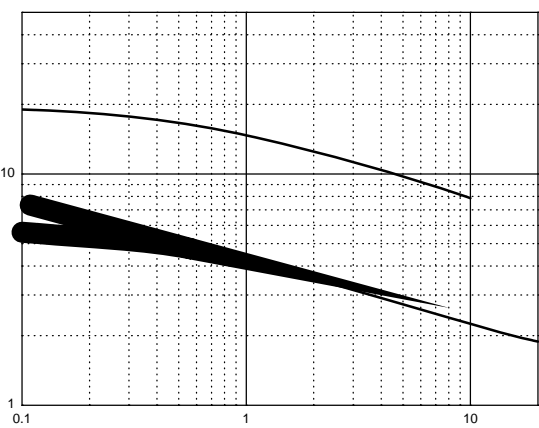
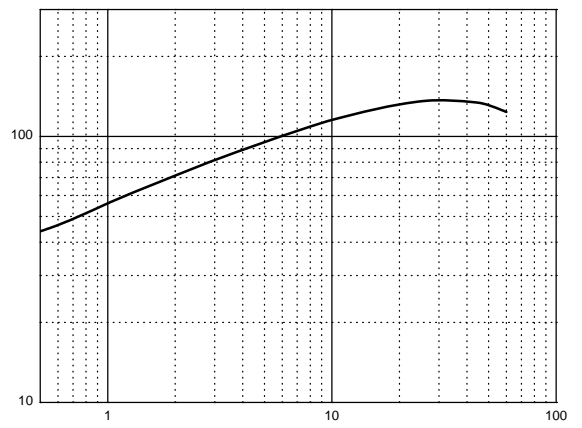
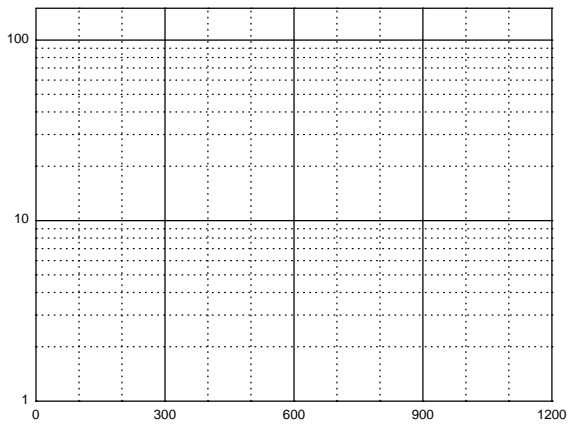
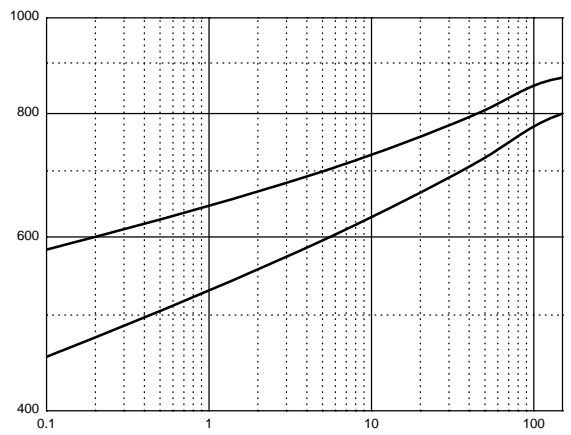
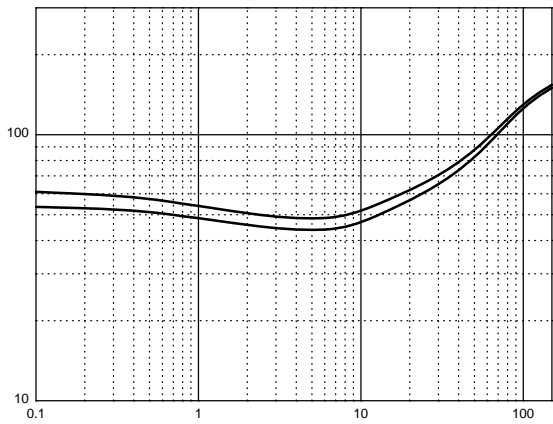
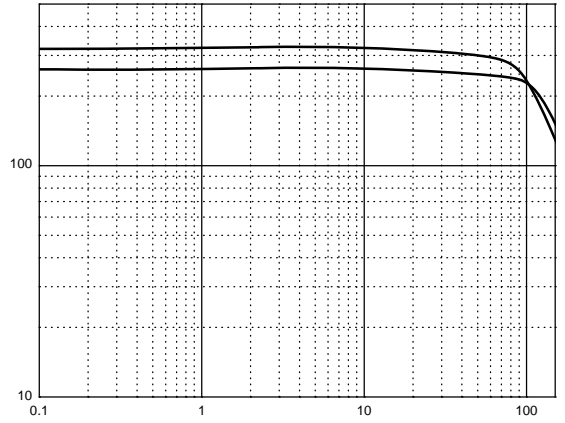
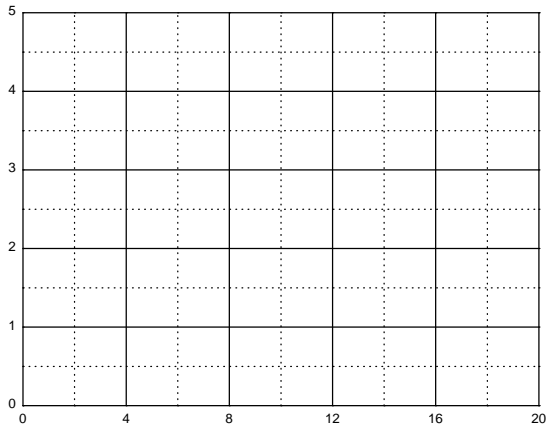
6\PERO	3DUDPHWHU	9DOXH	8QLW
9&%2	&ROO%FDWRIU9ROWDJH		9
9&(2	&ROO%FDWRIU9ROWDJH		9
9(%2	(PLW%FDWRIU9ROWDJH		9
.&	&ROOHFWRU &XUUHQW		P\$
3&	&ROOHFWRU 3RZHU 'LVVLSDWLRQ		P:
5,-\$	7KHUPDO 5HVLVWDFWLRQ		/ :
7M	-XQFWLRQ 7HPSHUDWXUH		/
7VWJ	6WRUDJH 7HPSHUDWXUH		/

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°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	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0$	7			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=60V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=7V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=1mA$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$			0.4	V
Transition frequency	$f_T$	$V_{CE}=12V, I_C=-2mA, f=100MHz$		160		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=12V, I_E=0, f=1MHz$		2.0	3.5	pF

**CLASSIFICATION OF  $h_{FE}$**

Rank	Q	R	S
Range	120 - 270	180 - 390	270 - 560
Marking	BQ	BR	BS



Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

—  
2000  
1  
1000  
—  
500