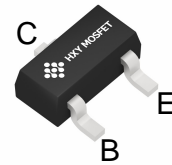




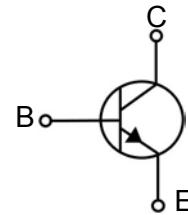
## Features

Collector Power Dissipation: 200mW

Collector Current:  $I_C = 150\text{mA}$



SOT-23



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
H2SC2412	SOT-23	BQ/BR/BS	3000

## 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	7	V
$I_C$	Collector Current	150	mA
$P_C$	Collector Power Dissipation	150	mW
$T_J, T_{stg}$	Operation Junction And Storage Temperature Range	$-55 \sim +150$	$^\circ\text{C}$

## Electrical Characteristics ( $T_a=25^\circ\text{C}$ unless otherwise specified)

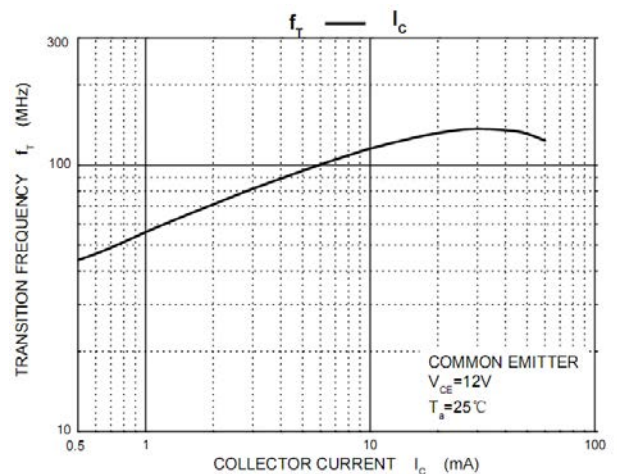
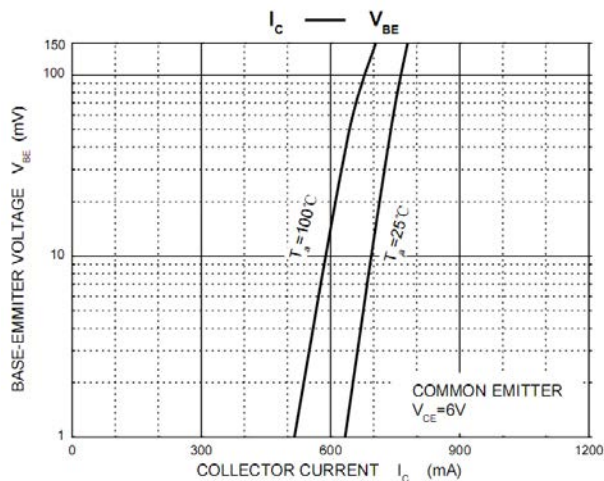
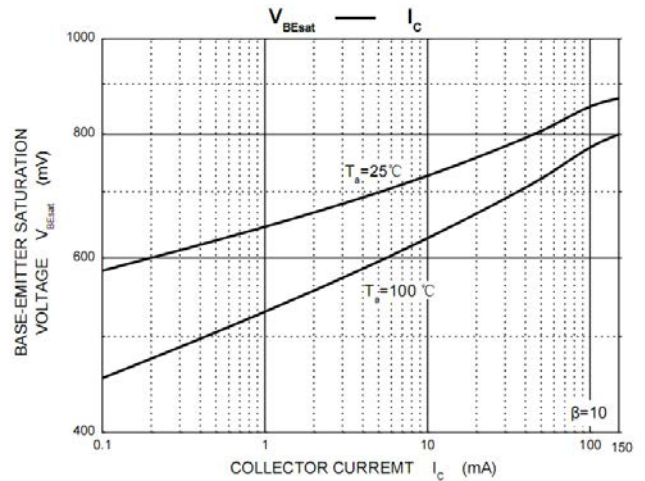
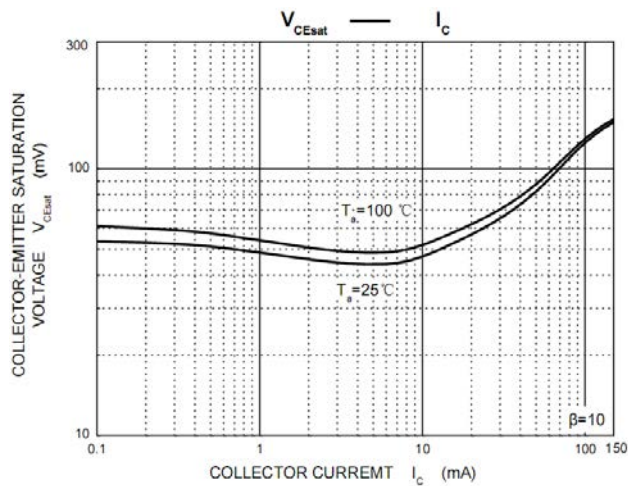
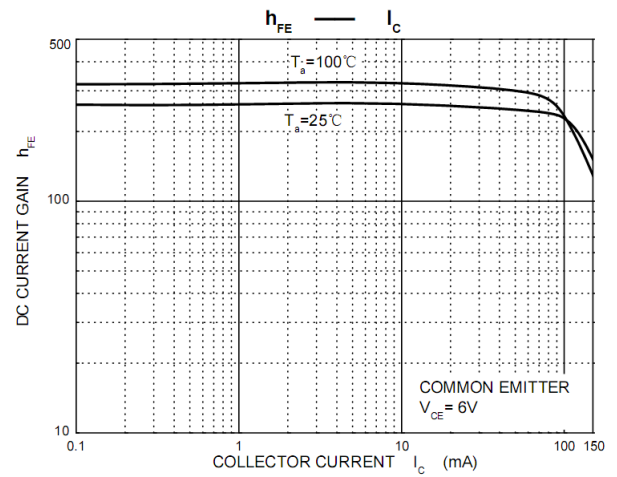
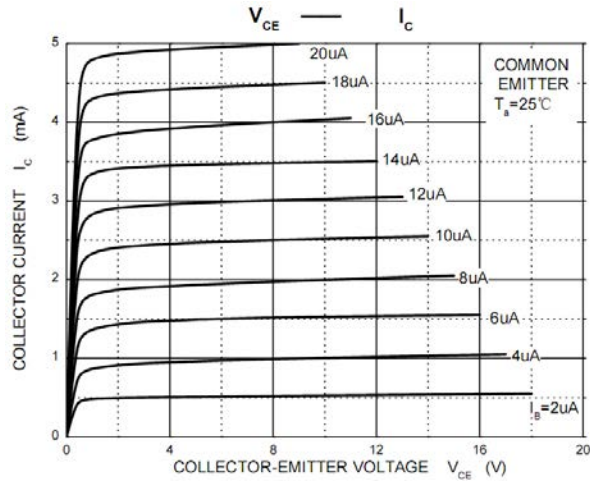
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu\text{A}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu\text{A}, I_C=0$	7			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=60\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=7\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current transfer ratio	$h_{FE}$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.4	V
Transition frequency	$f_T$	$V_{CE}=12\text{V}, I_C=2\text{mA}, f=100\text{MHz}$		180		MHz
Output capacitance	$C_{ob}$	$V_{CB}=12\text{V}, I_E=0, f=1\text{MHz}$			3.5	pF

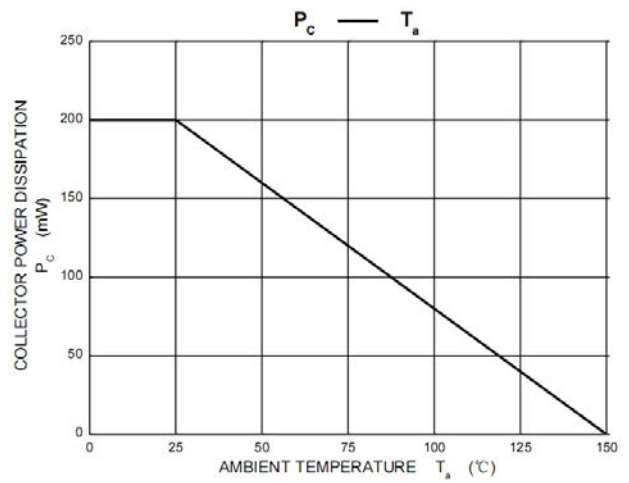
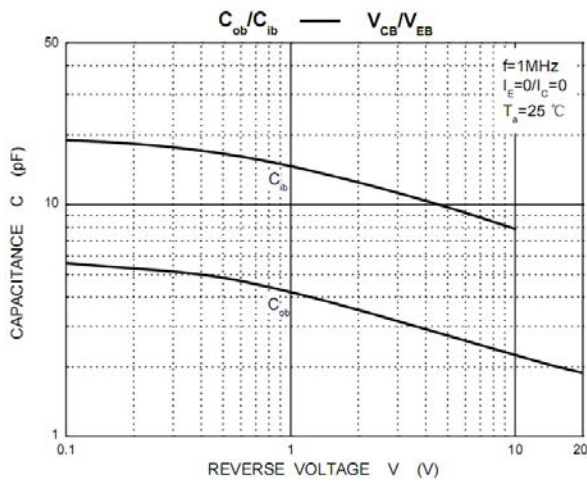
## Classification Of $h_{FE}$

Rank	H2SC2412KT146Q	H2SC2412KT146R	H2SC2412KT146S
Range	120-270	180-390	270-560
Marking	BQ	BR	BS

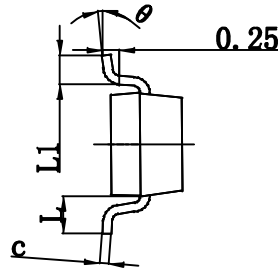
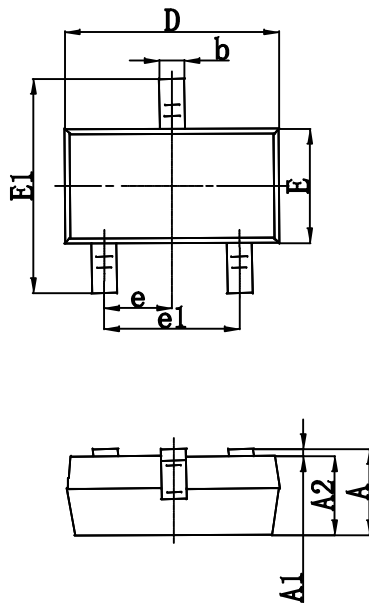


## Typical Characteristics





### SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
$\theta$	0°	8°	0°	8°



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