

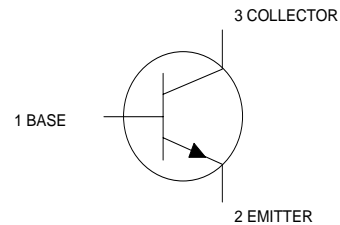
»Features

$V_{CE} = 50V$

$I_C = 0.15A$

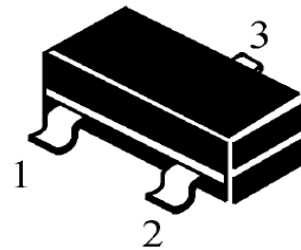
$f_T = 300MHz @V_{CE}=12V, I_C=2mA, f=100MHz$

»Pin Configurations



»General Description

- Excellent hFE linearity, Complementary pair with 2SA1037AK.
- Epitaxial planar die construction
- SOT-23 Plastic Package.



»Absolute Maximum Ratings @ $T_A=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
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 -Continuous	150	mA
P_C	Total Device Dissipation	225	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	$^{\circ}C/W$
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55 to +150	$^{\circ}C$

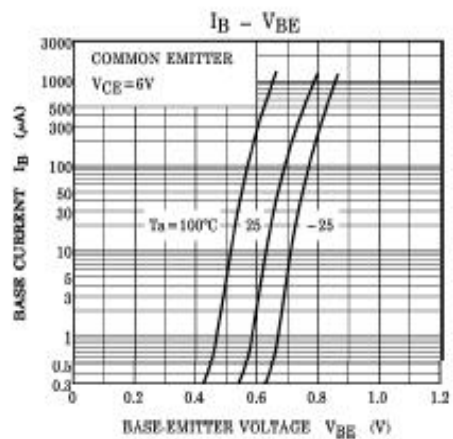
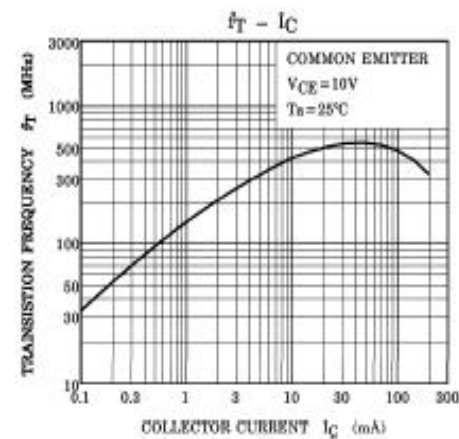
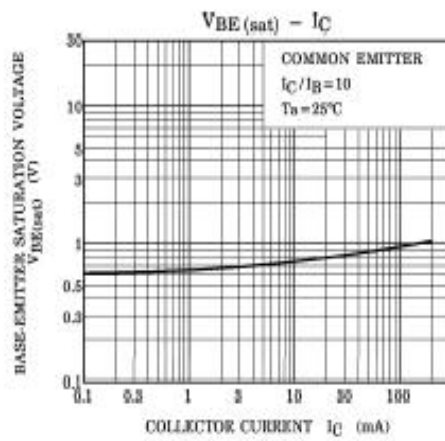
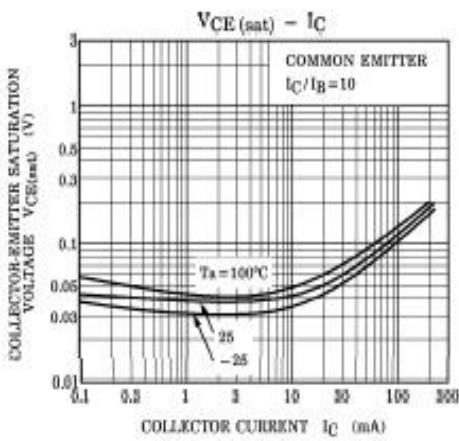
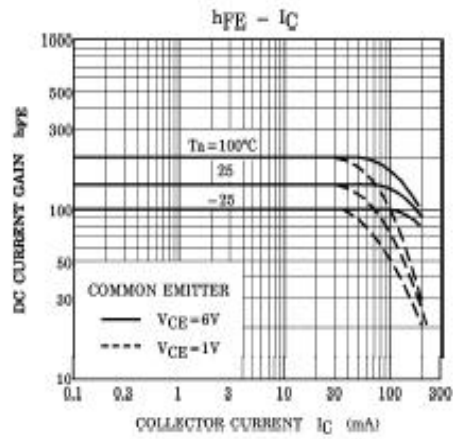
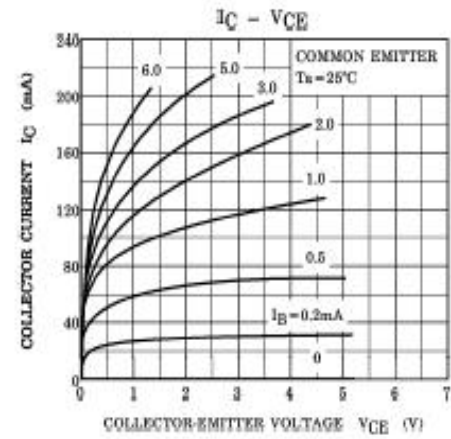
»Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	V_{CBO}	$I_C=50\mu\text{A}, I_E=0$	60		V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=1\text{mA}, I_B=0$	50		V
Emitter-base breakdown voltage	V_{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	μA
Collector cut-off current	I_{CEX}	$V_{CE}=30\text{V}, V_{BE(off)}=3\text{V}$		50	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=7\text{V}, I_C=0$		0.1	μA
DC current gain	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
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		1.0	V
Transition frequency	f_T	$V_{CE}=12\text{V}, I_C=2\text{mA}, f=100\text{MHz}$	300		MHz
Collector Output Capacitance	C_{ob}	$V_{CE}=12\text{V}, I_C=0\text{mA}, f=100\text{MHz}$	2.0	3.0	pF

CLASSIFICATION OF $h_{FE(1)}$

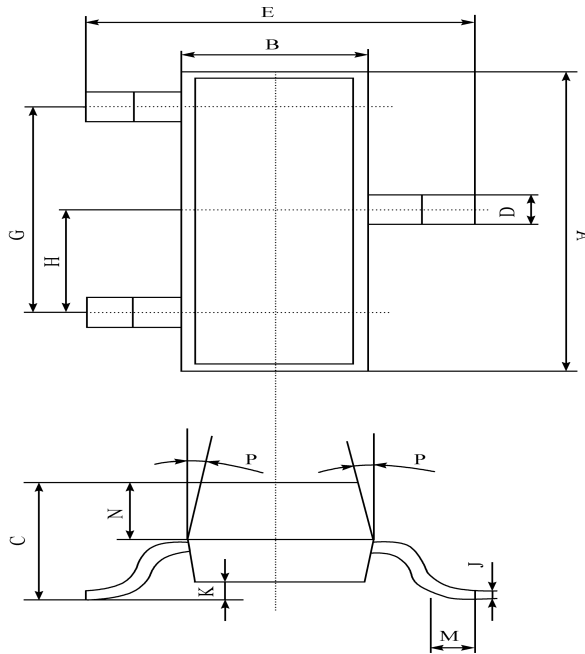
Rank	Q	R	S
Range	120~270	180~390	270~560

»Typical Performance Characteristics (T_J = 25 °C, unless otherwise noted)



»Package Information

SOT-23



A	2.90 ± 0.10
B	1.30 ± 0.10
C	1.00 ± 0.10
D	0.40 ± 0.10
E	2.40 ± 0.20
G	1.90 ± 0.10
H	0.95 ± 0.05
J	0.13 ± 0.05
K	0.00-0.10
M	≥ 0.2
N	0.60 ± 0.10
P	7 ± 2°

»Ordering information

Order code	Package	Marking	Base qty	Deliverymode
2SC2412	SOT-23	BR	3K	Tape and reel