

SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

### FEATURES

- Power dissipation:  $P_{CM}=200\text{mW}$ .
- High  $I_{CM(\text{MAX.})}, I_{CM(\text{MAX.})}=0.5\text{mA}$ .
- Low  $V_{CE(\text{sat})}$ .
- Complements the 2SA1036.

### APPLICATIONS

- NPN Silicon Epitaxial Planar Transistor.

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SC2411	CP/CQ/CR	SOT-23

SOT-23

### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	40	V
$V_{CEO}$	Collector-Emitter Voltage	32	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	500	mA
$P_C$	Collector Dissipation	200	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +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	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=20\text{V}, I_E=0$			1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$			1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=3\text{V}, I_C=100\text{mA}$	82		390	
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C=500\text{mA}, I_B=50\text{mA}$			0.4	V
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0$ $f=1\text{MHz}$		6.0		pF
Transition frequency	$f_T$	$V_{CE}=5\text{V}, I_C=-20\text{mA}$ $f=100\text{MHz}$		250		MHz

### CLASSIFICATION OF $h_{FE(1)}$

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	CP	CQ	CR

### TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

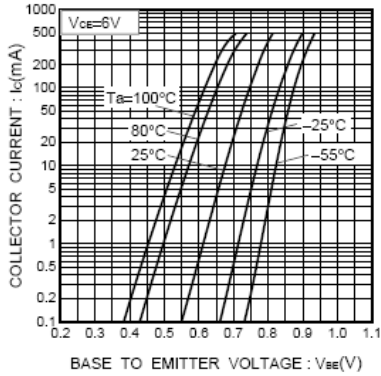


Fig.1 Grounded emitter propagation characteristics

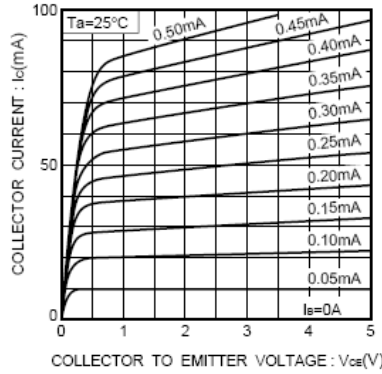


Fig.2 Grounded emitter output characteristics(I)

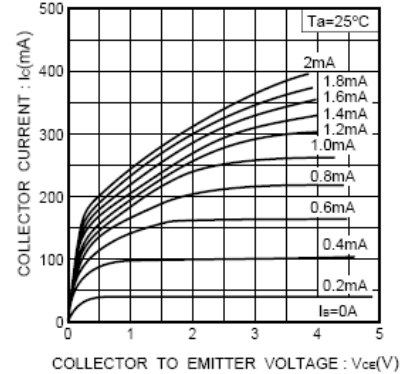


Fig.3 Grounded emitter output characteristics(II)

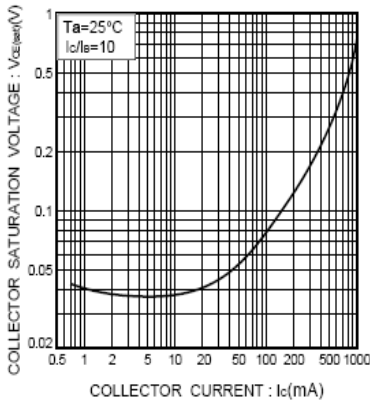


Fig.4 Collector-emitter saturation voltage vs. collector current

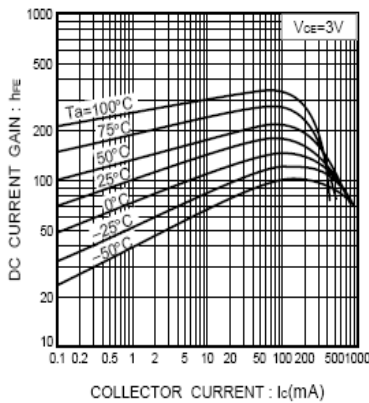


Fig.5 DC current gain vs. collector current

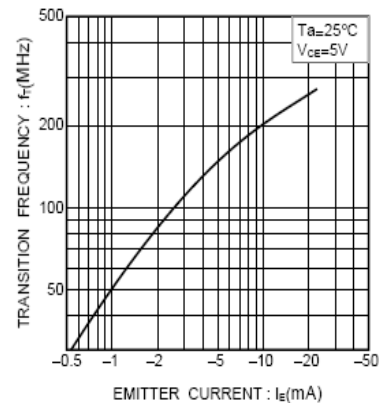


Fig.6 Gain bandwidth product vs. emitter current

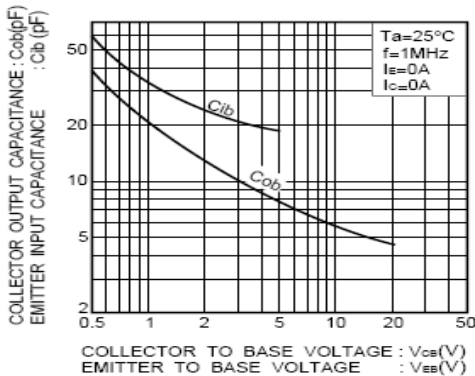


Fig.7 Collector output capacitance vs. collector-base voltage  
Emitter input capacitance vs. emitter-base voltage

Device	Package	Shipping
2SC2411	SOT-23	3000/Tape&Reel