



Micro Commercial Components



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2SC2411-P
2SC2411-Q
2SC2411-R

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- High I_C . $I_{CMax.} = 0.5 A$
- Low $V_{CE(sat)}$. Optimal for low voltage operation.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings @ $T_a = 25^\circ C$ (unless otherwise noted)

Symbol	Parameter	Value	Unit
I_C	Collector Current	0.5	A
P_D	Collector Power Dissipation	0.2	W
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ C$

Electrical Characteristics @ $25^\circ C$ Unless Otherwise Specified

Symbol	Parameter	Min	TYPE	Max	Units
OFF CHARACTERISTICS					
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=1mA_{dc}, I_B=0$)	32			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu A_{dc}, I_E=0$)	40			V
$V_{(BR)EBO}$	Collector-Base Breakdown Voltage ($I_E=100\mu A_{dc}, I_C=0$)	5.0			V
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=20V_{dc}, I_E=0$)			1	μA_{dc}
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=4.0V_{dc}, I_C=0$)			1	μA_{dc}

ON CHARACTERISTICS

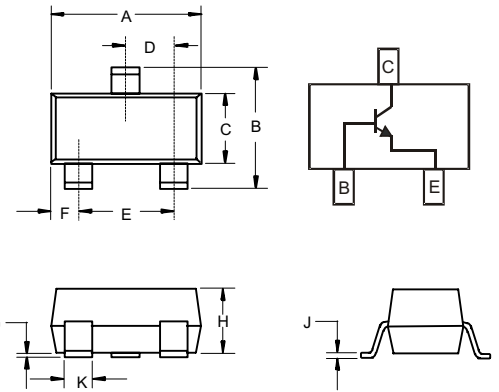
H_{FE}	DC Current Gain ($I_C=100mA_{dc}, V_{CE}=3.0V_{dc}$)	82		390	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=500mA_{dc}, I_B=50mA_{dc}$)			0.4	Vdc
F_T	Transition Frequency ($V_{CE}=5V_{dc}, I_C=20mA_{dc}, f=100MHZ$)		250		MHZ
C_{ob}	($V_{CB}=10V_{dc}, I_E=0, f=1MHZ$)		6.0		pF

CLASSIFICATION OF h_{FE}

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

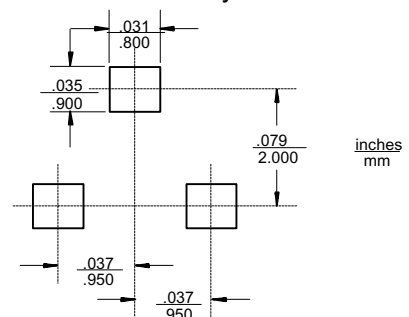
NPN Silicon Epitaxial Transistors

SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



2SC2411 Typical characteristics

● Electrical characteristic curves

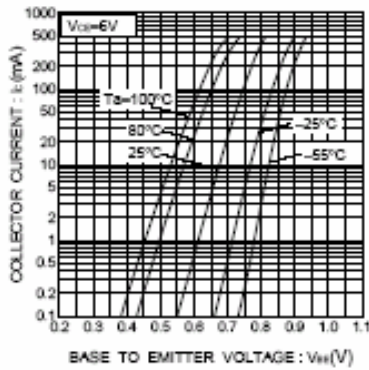


Fig.1 Grounded emitter propagation characteristics

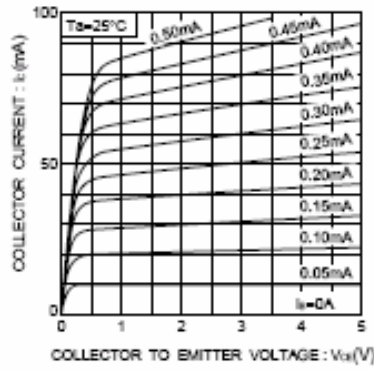


Fig.2 Grounded emitter output characteristics(I)

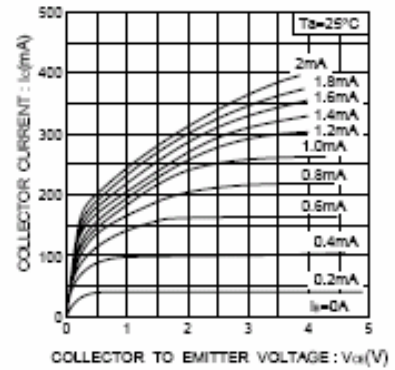


Fig.3 Grounded emitter output characteristics(II)

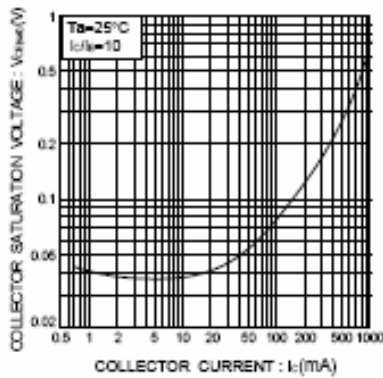


Fig.4 Collector-emitter saturation voltage vs. collector current

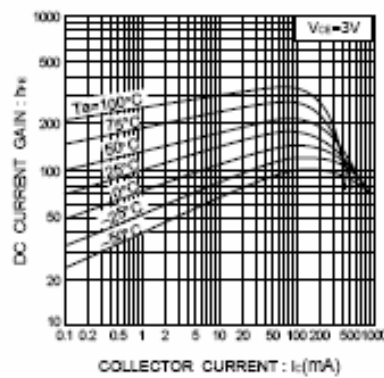


Fig.5 DC current gain vs. collector current

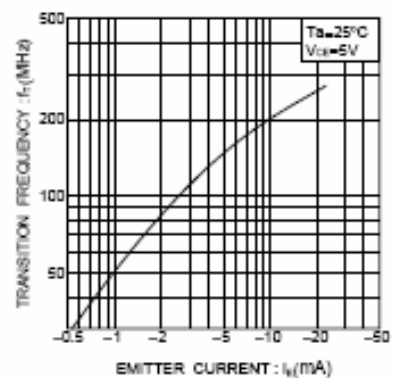


Fig.6 Gain bandwidth product vs. emitter current

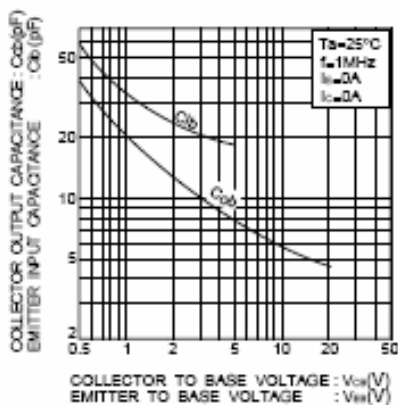


Fig.7 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage



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Ordering Information :

Device	Packing
Part Number-TP	Tape & Reel; 3 Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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