



Micro Commercial Components



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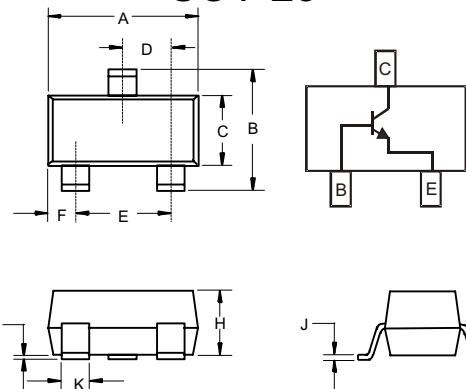
2SC2411-P 2SC2411-Q 2SC2411-R

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

NPN Silicon Epitaxial Transistors

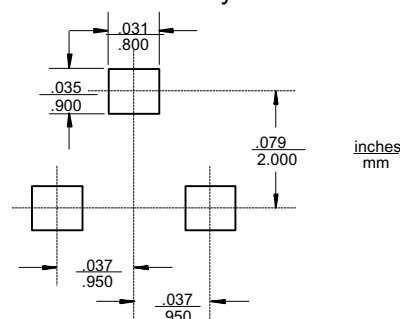
SOT-23



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	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



Maximum Ratings @ $T_a = 25^\circ\text{C}$ (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	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$

Electrical Characteristics @ 25°C Unless Otherwise Specified

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

ON CHARACTERISTICS

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

CLASSIFICATION OF h_{FE}

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

2SC2411 Typical characteristics

● Electrical characteristic curves

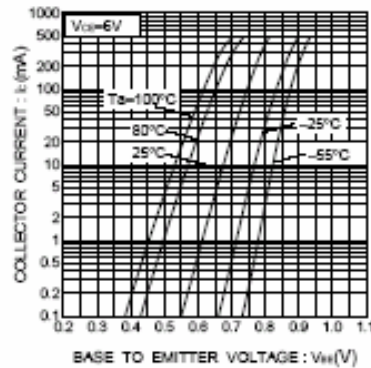


Fig.1 Grounded emitter propagation characteristics

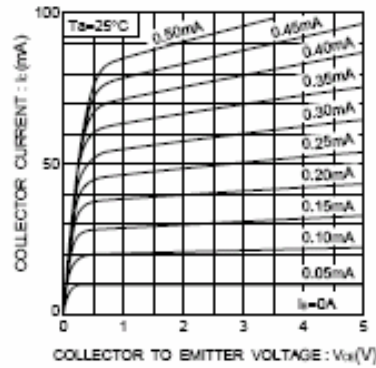


Fig.2 Grounded emitter output characteristics(I)

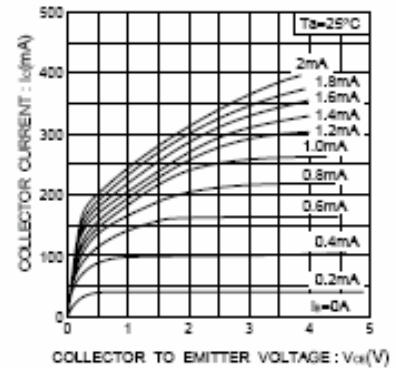


Fig.3 Grounded emitter output characteristics(II)

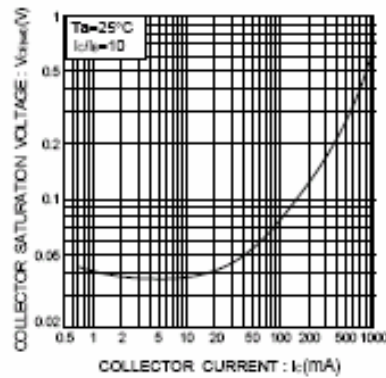


Fig.4 Collector-emitter saturation voltage vs. collector current

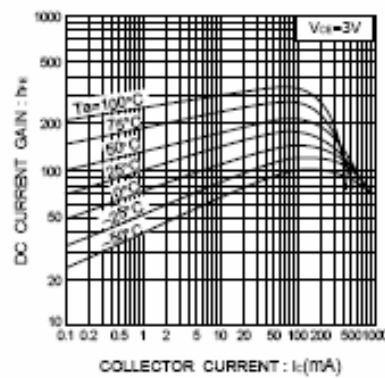


Fig.5 DC current gain vs. collector current

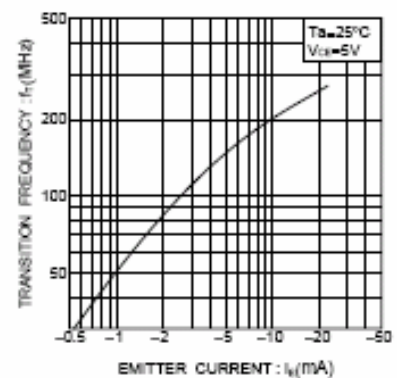


Fig.6 Gain bandwidth product vs. emitter current

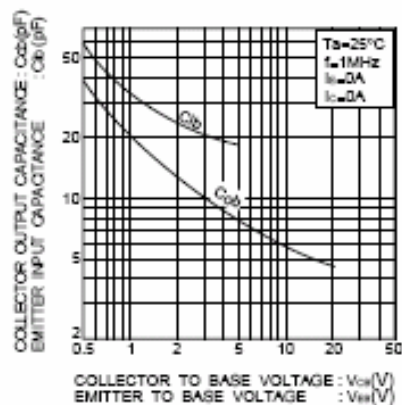


Fig.7 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage

Ordering Information :

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

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