



Micro Commercial Components

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2SC2412K

NPN Silicon Epitaxial Transistors

Features

- Power Dissipation: 0.2W ($T_A=25^\circ\text{C}$)
- Collector Current: 0.15A
- Collector-base Voltage: 60V
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CE0}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7.0	V
I_C	Collector Current	0.15	A
P_C	Collector power dissipation	0.2	W
T_J	Junction Temperature	-55 to +150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 to +150	$^\circ\text{C}$

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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OFF CHARACTERISTICS

V_{CE0}	Collector-Emitter Voltage ($I_C=1.0\text{mA}$, $I_B=0$)	50	---	---	Vdc
V_{CBO}	Collector-Base Voltage ($I_C=50\mu\text{A}$, $I_E=0$)	60	---	---	Vdc
V_{EBO}	Emitter-Base Voltage ($I_E=50\mu\text{A}$, $I_C=0$)	7.0	---	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=60\text{Vdc}$, $I_E=0$)	---	---	0.1	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=7.0\text{Vdc}$, $I_C=0$)	---	---	0.1	μA

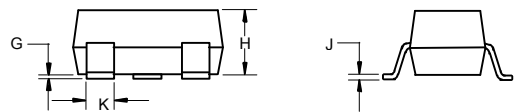
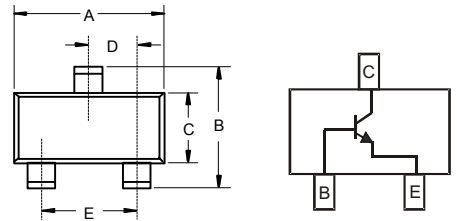
ON CHARACTERISTICS

h_{FE}	DC Current Gain ($I_C=1.0\text{mA}$, $V_{CE}=6.0\text{Vdc}$)	120	---	560	---
$V_{CE(sat)}$	Collector Saturation Voltage ($I_C=50\text{mA}$, $I_E=5.0\text{mA}$)	---	---	0.4	Vdc
f_T	Transition Frequency ($V_{CE}=12\text{Vdc}$, $I_C=2.0\text{mA}$, $f=100\text{MHz}$)	150	---	---	MHz

CLASSIFICATION OF h_{FE}

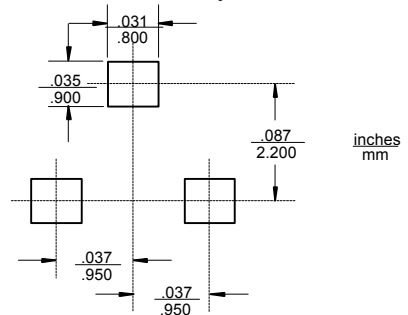
Rank	Q	R	S
Range	120-270	180-390	270-560
Marking	BQ	BR	BS

SOT-23-3L



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.113	.117	2.87	2.97	
B	.108	.112	2.75	2.85	
C	.061	.065	1.55	1.65	
D	.036	.038	.925	.975	
E	.073	.077	1.85	1.95	
G	.0016	.0039	.04	.100	
H	.044	.049	1.12	1.25	
J	.006	.007	.14	.17	
K	.013	.015	.34	.37	

Suggested Solder Pad Layout





TM

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