



Micro Commercial Components



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2SA1037-Q 2SA1037-R 2SA1037-S

Features

- Small Package
- Mounting: any position
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

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

Symbol	Parameter	Value	Unit
I_C	Collector Current	-0.15	A
P_D	Total Device 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

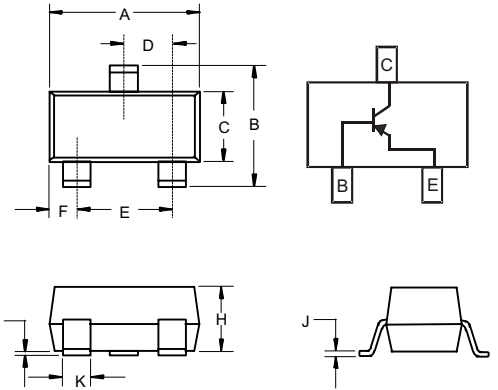
Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C = -1\text{mA}$, $I_B = 0$)	-50		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C = -50\text{uA}$, $I_E = 0$)	-60		V
$V_{(BR)EBO}$	Collector-Base Breakdown Voltage ($I_E = -50\text{uA}$, $I_C = 0$)	-6.0		V
I_{CBO}	Collector-Base Cutoff Current ($V_{CB} = -60\text{Vdc}$, $I_E = 0$)		-0.1	μA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB} = -6.0\text{Vdc}$, $I_C = 0$)		-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-Emitter Saturation Voltage ($I_C = -5.0\text{mA}$, $I_B = -5.0\text{mA}$)		-0.5	Vdc
F_T	Transition Frequency ($V_{CE} = -12\text{Vdc}$, $I_C = -2\text{mA}$, $f = 30\text{MHz}$)	120		MHZ

CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	120-270	180-390	270-560
Marking	FQ	FR	FS

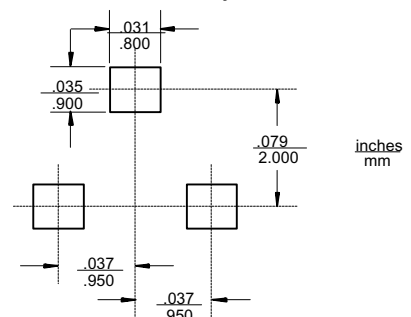
PNP Silicon Epitaxial Transistors

SOT-23



DIMENSIONS					
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



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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