



Micro Commercial Components



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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

2SA1577-P
2SA1577-Q
2SA1577-R

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Ideally Suited for Automatic Insertion
- Untral Small Surface Mount Package
- Pb-Free Package are Vailable
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- 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	-0.5	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	Unit
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 ($V_{CB} = -20\text{V}$, $I_E = 0$)		-1	μA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB} = 4.0\text{V}$, $I_C = 0$)		-1	μA

ON CHARACTERISTICS

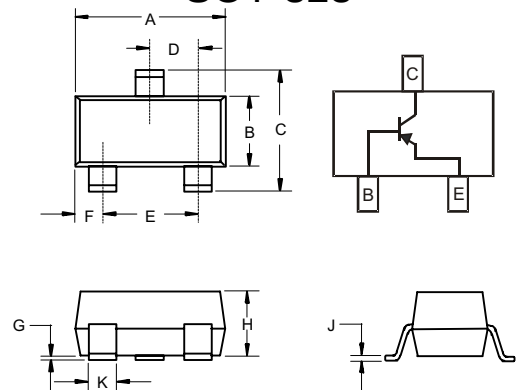
h_{FE}	DC Current Gain ($I_C = -10\text{mA}$, $V_{CE} = -3.0\text{V}$)	82	390	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C = -0.1\text{A}$, $I_B = -0.01\text{A}$)		-0.4	Vdc
f_T	Transition Frequency ($V_{CE} = -5\text{V}$, $I_C = -20\text{mA}$, $f = 100\text{MHz}$)		200(typ)	MHZ
C_{ob}	Collector Output Capacitance ($V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$)		7(typ)	PF

CLASSIFICATION OF h_{FE}

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	HP	HQ	HR

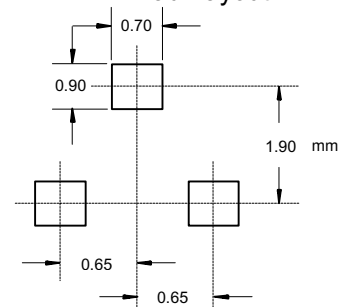
PNP
Gneral Purpose
Transistors

SOT-323



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

**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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