



Micro Commercial Components



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

Features

- Halogen free available upon request by adding suffix "-HF"
- Power dissipation: 200mW ($T_{amb}=25^{\circ}\text{C}$)
- Collector current: 0.2A
- Marking : K4N
- Operating and Storage junction temperature range
-55°C to + 150°C
- Lead Free Finish/RoHS Compliant ("P" Suffix designates
RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

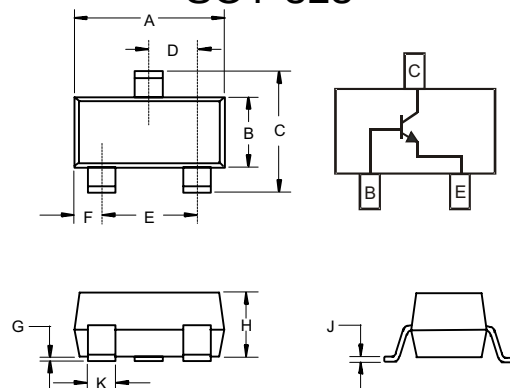
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS ⁽²⁾				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=1.0\text{mA}$, $I_B=0$)	160	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu\text{A}$, $I_E=0$)	180	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ($I_E=10\mu\text{A}$, $I_C=0$)	5.0	---	Vdc
I_{CEO}	Collector Cutoff Current ($V_{CB}=35\text{Vdc}$, $I_E=0\text{Vdc}$)	---	50	nAdc
I_{EBO}	Emitter Cutoff Current ($V_{EB}=5\text{Vdc}$, $I_C=0\text{Vdc}$)	---	50	nAdc
h_{FE}	DC Current Gain ($I_C=1\text{mA}$, $V_{CE}=5\text{Vdc}$) ($I_C=10\text{mA}$, $V_{CE}=5\text{Vdc}$) ($I_C=50\text{mA}$, $V_{CE}=5\text{Vdc}$)	80 80 30	--- 250 ---	--- --- ---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=10\text{mA}$, $I_B=1\text{mA}$) ($I_C=50\text{mA}$, $I_B=5\text{mA}$)	--- ---	0.15 0.2	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=10\text{mA}$, $I_B=1\text{mA}$) ($I_C=50\text{mA}$, $I_B=5\text{mA}$)	--- ---	1 1	Vdc
f_T	Current Gain-Bandwidth Product ($V_{CE}=10\text{Vdc}$, $I_C=20\text{mA}$, $f=100\text{MHz}$)	100	300	MHz
C_{ob}	Output Capacitance ($V_{CB}=10\text{Vdc}$, $f=1.0\text{MHz}$, $I_E=0$)	---	6	pF
NF	Noise Figure ($V_{CE}=5\text{V}$, $I_C=0.2\text{mA}$, $f=1\text{KHz}$, $R_g=10\Omega$)	---	8	dB

MMST5551

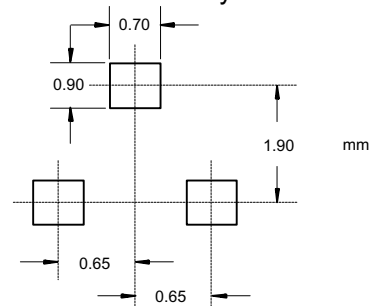
NPN Small Signal Transistors

SOT-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
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	.006	.016	.15	.40	

Suggested Solder Pad Layout



Ordering Information :

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

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

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