



Micro Commercial Components

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

# MMST5551

## Features

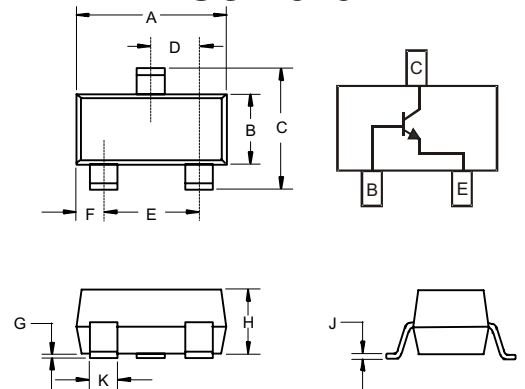
- Power dissipation: 200mW ( $T_{amb}=25^{\circ}C$ )
- Collector current: 0.2A
- Marking : K4N
- Operating and Storage junction temperature range  
 -55°C to + 150°C
- Case Material:Molded Plastic. UL Flammability  
 Classificatio Rating 94-0 and MSL Rating 1

## NPN Small Signal Transistors

### Electrical Characteristics @ 25°C Unless Otherwise Specified

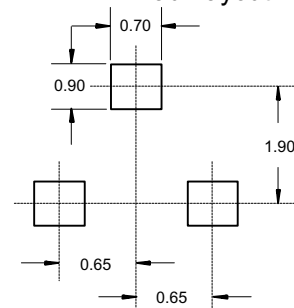
Symbol	Parameter	Min	Max	Units
<b>OFF CHARACTERISTICS <sup>(2)</sup></b>				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=1.0mA$ , $I_B=0$ )	160	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=100\mu A$ , $I_E=0$ )	180	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage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

### 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	.079	.087	2.00	2.20	
D	.026 Nominal		0.65Nominal		
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





Micro Commercial Components

## Ordering Information

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

### \*\*\*IMPORTANT NOTICE\*\*\*

*Micro Commercial Components Corp.* reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*APPLICATIONS DISCLAIMER\*\*\*

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.