

# M.C.C.

Micro Commercial Components



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## MMST5401

### Features

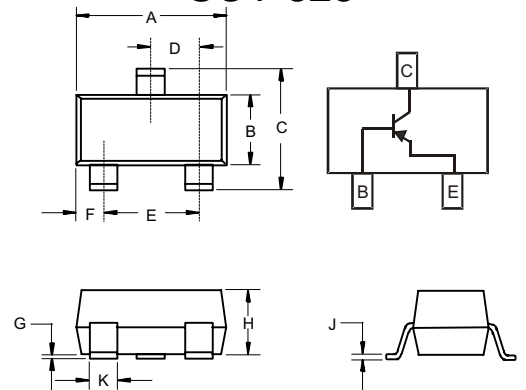
- Halogen free available upon request by adding suffix "-HF"
- Power dissipation: 200mW ( $T_{amb}=25^{\circ}\text{C}$ )
- Collector current: -0.2A
- Marking : K4M
- Operating and Storage junction temperature range  
-55°C to + 150°C
- Lead Free Finish/RoHS Compliant ("P" Suffix designates  
RoHS Compliant. 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
<b>OFF CHARACTERISTICS <sup>(2)</sup></b>				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=-1.0\text{mA}$ , $I_B=0$ )	-150	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=-100\mu\text{A}$ , $I_E=0$ )	-160	---	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 ( $V_{CB}=-120\text{Vdc}$ , $I_E=0\text{Vdc}$ )	---	-50	nAdc
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=-3\text{Vdc}$ , $I_C=0\text{Vdc}$ )	---	-50	nAdc
$h_{FE}$	DC Current Gain ( $I_C=-1\text{mA}$ , $V_{CE}=-5\text{Vdc}$ ) ( $I_C=-10\text{mA}$ , $V_{CE}=-5\text{Vdc}$ ) ( $I_C=-50\text{mA}$ , $V_{CE}=-5\text{Vdc}$ )	50 60 50	--- 240 ---	--- --- ---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=-10\text{mA}$ , $I_B=-1\text{mA}$ ) ( $I_C=-50\text{mA}$ , $I_B=-5\text{mA}$ )	---	-0.2 -0.5	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 ( $V_{CE}=-10\text{Vdc}$ , $I_C=-10\text{mA}$ , $f=100\text{MHz}$ )	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

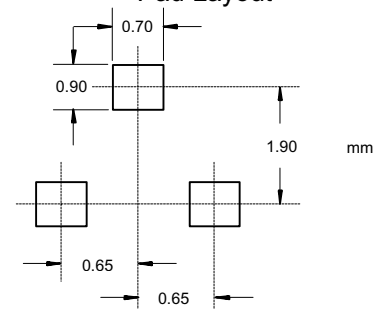
## PNP Small Signal Transistors

### 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	.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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