



Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 Fax:

MMST5551

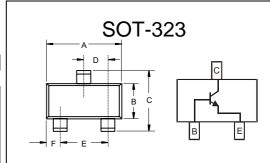
Features

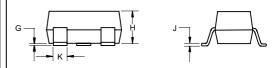
- Halogen free available upon request by adding suffix "-HF"
- Power dissipation: 200mW (T_{amb}=25 °C)
- Collector current: 0.2A
- Marking: K4N
- Operating and Storage junction temperature range -55°C to + 150°C
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)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

Moisure 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 =1.0mAdc, I _B =0) | 160 | | Vdc | | |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage (I _C =100uAdc, I _E =0) | 180 | | Vdc | | |
| $V_{(BR)EBO}$ | Collector-Emitter Breakdown Voltage 5.0 (I _E =10uAdc, I _C =0) | | | | | |
| 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 ($I_C=1$ mAdc, $V_{CE}=5$ Vdc) ($I_C=10$ mAdc, $V_{CE}=5$ Vdc) ($I_C=50$ mAdc, $V_{CE}=5$ Vdc) | 80 80 30 | 250 | | | |
| $V_{\text{CE(sat)}}$ | Collector-Emitter Saturation Voltage (I _C =10mAdc, I _B =1mAdc) (I _C =50mAdc, I _B =5mAdc) | | 0.15 0.2 | Vdc | | |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage (I_c =10mAdc, I_B =1mAdc) (I_c =50mAdc, I_B =5mAdc) | | 1 | Vdc | | |
| f _T | Current Gain-Bandwidth Product (V _{CE} =10Vdc, I _C =20mAdc, f=100MHz) 100 300 | | 300 | MHz | | |
| C_{ob} | Output Capacitance (V _{CB} =10Vdc, f=1.0MHz, I _E =0) 6 | | | | | |
| NF | Noise Figure $(V_{CE}=5V, I_{C}=0.2mA, f=1KHz, R_{o}=10 \Omega)$ | | 8 | dB | | |

NPN Small Signal Transistors





| DIMENSIONS | | | | | | | |
|------------|--------------|------|-------------|------|------|--|--|
| | INCHES | | ММ | | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | | |
| Α | .071 | .087 | 1.80 | 2.20 | | | |
| В | .045 | .053 | 1.15 | 1.35 | | | |
| C | .083 | .096 | 2.10 | 2.45 | | | |
| D | .026 Nominal | | 0.65Nominal | | | | |
| Е | .047 | .055 | 1.20 | 1.40 | | | |
| F | .012 | .016 | .30 | .40 | | | |
| G | .000 | .004 | .000 | .100 | | | |
| Ι | .035 | .039 | .90 | 1.00 | | | |
| J | .004 | .010 | .100 | .250 | | | |
| K | .006 | .016 | .15 | .40 | | | |

Suggested Solder Pad Layout



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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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