



**Micro Commercial Components** 

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# **MMST4403**

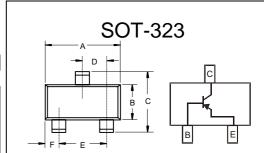
# **Features**

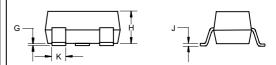
- Halogen free available upon request by adding suffix "-HF"
- Power dissipation: 200mW (T<sub>amb</sub>=25 °C)
- Collector current: -0.6A
- Marking: K3T
- Operating and Storage junction temperature range -55℃ to + 150℃
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering 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-Emitte<br>(I <sub>C</sub> =-1.0mAdc,  | -40   |      | Vdc   |       |  |  |  |
| $V_{(BR)CBO}$           |   | Collector-Base Breakdown Voltage<br>(I <sub>C</sub> =-100uAdc, I <sub>E</sub> =0) |      |       | Vdc   |  |  |  |
| $V_{(BR)EBO}$           | Collector-Emitte<br>(I <sub>E</sub> =-100uAdc,  | -5.0  |      | Vdc   |       |  |  |  |
| I <sub>CBO</sub>        | Collector Cutoff<br>(V <sub>CB</sub> =-35Vdc, I   |   | -0.1 | μAdc  |       |  |  |  |
| I <sub>CEO</sub>        | Collector Cutoff Current (V <sub>CE</sub> =-35Vdc, I <sub>B</sub> =0Vdc)                    |   |      | -0.1  | μAdc  |  |  |  |
| I <sub>EBO</sub>        | Emitter Cutoff Current<br>(V <sub>EB</sub> =-4Vdc, I <sub>C</sub> =0Vdc)                    |   |      | -0.1  | μAdc  |  |  |  |
| h <sub>FE</sub>         | DC Current Gain<br>(I <sub>C</sub> =-150mAdc, V <sub>CE</sub> =-2Vdc)                       |   | 100  | 300   |       |  |  |  |
| V <sub>CE(sat)</sub>    | Collector-Emitter Saturation Voltage (I <sub>C</sub> =-150mAdc, I <sub>B</sub> =-15mAdc)    |   |      | -0.4  | Vdc   |  |  |  |
| $V_{BE(sat)}$           | Base-Emitter Saturation Voltage (I <sub>C</sub> =-150mAdc, I <sub>B</sub> =-15mAdc)         |   |      | -0.95 | Vdc   |  |  |  |
| f <sub>T</sub>          | Current Gain-Bandwidth Product (V <sub>CE</sub> =-10Vdc, I <sub>C</sub> =-20mAdc, f=100MHz) |   | 200  |       | MHz   |  |  |  |
| $C_{ob}$                | Output Capacitance<br>(V <sub>CB</sub> =-10Vdc, f=1.0MHz, I <sub>E</sub> =0)                |   |      | 8.5   | pF    |  |  |  |
| t <sub>d</sub>          | Delay Time  | $V_{CC}$ =-30V, $I_{C}$ =-150uA,  |      | 15    | ns    |  |  |  |
| t <sub>r</sub>          | Rise Time   | $V_{BE(off)}$ =-2V, $I_{B1}$ =15mA  |      | 20    | ns    |  |  |  |
| ts                      | Storage Time  | V <sub>CC</sub> =-30V, I <sub>C</sub> =-150mA,                                    |      | 225   | ns    |  |  |  |
| $t_f$                   | Fall Time   | $I_{B1}=I_{B2}=-15mA$   |      | 30    | ns    |  |  |  |

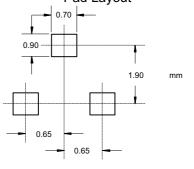
# **PNP Small Signal Transistors**





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

## Suggested Solder Pad Layout





#### **Micro Commercial Components**

## **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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# AMEYA360 Components Supply Platform

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