

# SURFACE MOUNT TRANSISTORS



## NPN TRANSISTORS - TO-236 PACKAGE

OPERATING/STORAGE TEMPERATURE RANGE -55°C to +150°C

| SURGE PART NUMBER | Marking Code | $V_{CE0}$ | $h_{FE} @ V_{CE}/I_C$ |        | $V_{CE SAT} @ I_C/I_B$ |        | $I_{CES} @ V_{CE}$ |     | $f_T @ V_{CE}/I_C$ |       | $C_{OB} @ V_{CB}$ |    |
|-------------------|--------------|-----------|-----------------------|--------|------------------------|--------|--------------------|-----|--------------------|-------|-------------------|----|
|                   |              | Volts     |                       | V/mA   | max.V                  | mA/mA  | max.nA             | V   | MHz                | V/mA  | max.pF            | V  |
| SMBT2222A         | 1P           | 40        | 100-300               | 10/150 | 1.0                    | 500/50 | $10^{(1)}$         | 60  | min.300            | 20/20 | 8                 | 10 |
| SMBT3904          | 1N           | 40        | 100-300               | 1/10   | 0.3                    | 50/5   | $50^{(2)}$         | 30  | min.300            | 20/10 | 4                 | 5  |
| SMBT4401          | 2X           | 40        | 100-300               | 1/150  | 0.75                   | 500/50 | $100^{(3)}$        | 35  | min.250            | 10/20 | 6.5               | 5  |
| SMBTA05           | 1H           | 60        | min.50                | 1/100  | 0.25                   | 100/10 | $100^{(3)}$        | 60  | min.100            | 2/10  | —                 | —  |
| SMBTA06           | 1G           | 80        | min.50                | 1/100  | 0.25                   | 100/10 | $100^{(3)}$        | 80  | min.100            | 2/10  | —                 | —  |
| SMBT5551          | 3S           | 160       | 80-250                | 5/10   | 0.25                   | 50/5   | $50^{(3)}$         | 120 | min.100            | 10/10 | 6                 | 10 |
| SMBTA42           | 1D           | 300       | 40min.                | 10/30  | 0.5                    | 20/2   | $100^{(3)}$        | 200 | min.50             | 20/16 | 4                 | 20 |

(1)  $I_{CBO} @ V_{CB}$

(2)  $I_{CEV} @ V_{EB}=3V$

(3)  $I_{CEV} @ V_{EB}=0.4V$

## PNP TRANSISTORS - TO-236 PACKAGE

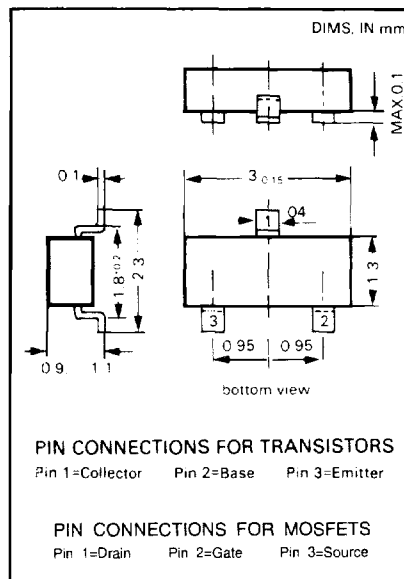
OPERATING/STORAGE TEMPERATURE RANGE -55°C to +150°C

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|-------------------|--------------|-----------|-----------------------|--------|------------------------|--------|--------------------|-----|--------------------|-------|-------------------|----|
|                   |              | Volts     |                       | V/mA   | max.V                  | mA/mA  | max.nA             | V   | MHz                | V/mA  | max.pF            | V  |
| SMBT2907A         | 2F           | 60        | 100-300               | 10/150 | 1.6                    | 500/50 | $10^{(1)}$         | 50  | min.200            | 20/50 | 8                 | 10 |
| SMBT3906          | 3N           | 40        | 100-300               | 1/10   | 0.4                    | 50/5   | $50^{(2)}$         | 30  | min.250            | 20/10 | 4.5               | 5  |
| SMBT4403          | 2T           | 40        | 100-300               | 1/150  | 0.75                   | 500/50 | $100^{(3)}$        | 35  | min.200            | 10/20 | 8.5               | 5  |
| SMBTA55           | 2H           | 60        | min.50                | 1/100  | 0.25                   | 100/10 | $100^{(3)}$        | 60  | min.100            | 2/10  | —                 | —  |
| SMBTA56           | 2G           | 80        | min.50                | 1/100  | 0.25                   | 100/10 | $100^{(3)}$        | 80  | min.100            | 2/10  | —                 | —  |
| SMBT5401          | 2L           | 150       | 40-200                | 10/1   | 0.2                    | 10/1   | $50^{(3)}$         | 120 | min.100            | 10/10 | 6                 | 10 |
| SMBTA92           | 2D           | 300       | 40min.                | 10/10  | 0.5                    | 20/2   | $250^{(3)}$        | 200 | min.50             | 20/10 | 8                 | 20 |

(1)  $I_{CBO} @ V_{CB}$

(2)  $I_{CEV} @ V_{EB}=3V$

(3)  $I_{CEV} @ V_{EB}=0.4V$



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