

## SMALL-SIGNAL TRANSISTORS & DIODES & MEDIUM-POWER RECTIFIERS

### Tuner transistors & diodes

**VARIABLE-CAPACITANCE DIODES**

| type number                        | $C_d$<br>(pF) | @ $V_R$<br>(V) | tuning range<br>over voltage range |              |                 | $r_s$<br>max.<br>( $\Omega$ ) | matched sets<br>$\Delta \frac{C_{max}}{C_{min}} < 3\%$ | package |
|------------------------------------|---------------|----------------|------------------------------------|--------------|-----------------|-------------------------------|--|---------|
|                                    |               |                | $C_d$<br>ratio                     | $V_1$<br>(V) | to $V_2$<br>(V) |                               |  |         |
| <b>Automatic frequency control</b> |               |                |                                    |              |                 |                               |  |         |
| BB119                              | 15.3-19.0     | 10             | >1.3                               | 4            | 10              | 1.5                           | no   | DO-35   |
| BB417                              | 2.2-2.4       | 15             | 2-5                                | 4            | 15              | 1.2                           | no   | DO-34   |
| <b>AM radio tuning</b>             |               |                |                                    |              |                 |                               |  |         |
| BB112                              | 17-29         | 8.5            | >18                                | 1            | 8.5             | 1.5                           | yes  | SOD69   |
| BB130                              | 12-21         | 28             | >23                                | 1            | 28              | 2.0                           | yes  | SOD69   |
| BB212 <sup>1)</sup>                | <22           | 8              | >22.5                              | 0.5          | 8               | 2.5                           | no   | TO-92   |
| <b>FM radio tuning</b>             |               |                |                                    |              |                 |                               |  |         |
| BB204B <sup>1)</sup>               | 14.0 typ.     | 30             | 2.5-2.8                            | 3            | 30              | 0.4                           | no   | TO-92   |
| BB804 <sup>1)</sup>                | 42-47.5       | 8              | 1.65-1.75                          | 2            | 8               | 0.25 typ.                     | no   | SOT23   |
| <b>VHF tuning</b>                  |               |                |                                    |              |                 |                               |  |         |
| BB132                              | 2.3-2.75      | 28             | 24-30                              | 0.5          | 28              | 2.0                           | yes <1%  | SOD323  |
| BB133                              | 2.2-2.6       | 28             | 14-21                              | 0.5          | 28              | 0.9                           | yes <0.7%  | SOD323  |
| BB148                              | 2.4-2.75      | 28             | >14.5                              | 1            | 28              | 0.9                           | yes  | SOD323  |
| BB150                              | 2.2-2.6       | 28             | 14-21                              | 0.5          | 28              | 0.9                           | no   | SOD323  |
| BB158                              | 2.4-2.75      | 28             | >14.5                              | 1            | 28              | 0.9                           | no   | SOD323  |
| BB619                              | 2.4-2.9       | 28             | >12.5                              | 1            | 28              | 0.7 typ.                      | yes  | SOD123  |
| BB620                              | 2.9-3.4       | 28             | 19.5-25                            | 1            | 28              | 1.3 typ.                      | yes  | SOD123  |
| BB809                              | 4.0-5.0       | 28             | 8-10                               | 1            | 28              | 0.6                           | yes  | DO-34   |
| BB901                              | <1.055        | 28             | >12                                | 0.5          | 28              | 3.0                           | no   | SOT23   |
| BB909A                             | 2.6-3.0       | 28             | 12-15                              | 1            | 28              | 0.9                           | yes  | DO-34   |
| BB909B                             | 2.8-3.2       | 28             | 12-15                              | 1            | 28              | 0.9                           | yes  | DO-34   |
| BB910                              | 2.3-2.7       | 28             | >14                                | 0.5          | 28              | 1.0                           | yes  | DO-34   |
| BB911/A                            | 2.4-2.9       | 28             | 23.3-28.4                          | 0.5          | 28              | 2.0                           | yes  | DO-34   |
| BBY40                              | 4.3-6.0       | 28             | 5-6.5                              | 3            | 25              | 0.7                           | no   | SOT23   |
| BBY42                              | 2.4-3.0       | 28             | 12-16                              | 1            | 28              | 1.0                           | no   | SOT23   |
| <b>UHF tuning</b>                  |               |                |                                    |              |                 |                               |  |         |
| BB134                              | 1.7-2.1       | 28             | 8.9-12                             | 0.5          | 28              | 0.75                          | yes <0.5%  | SOD323  |
| BB135                              | 1.7-2.1       | 28             | 8.9-12                             | 0.5          | 28              | 0.75                          | no   | SOD323  |
| BB149                              | 1.9-2.25      | 28             | 8.2-10                             | 1            | 28              | 0.75                          | yes  | SOD323  |
| BB159                              | 1.9-2.25      | 28             | 8.2-10                             | 1            | 28              | 0.75                          | no   | SOD323  |
| BB215                              | 1.8-2.2       | 28             | >7.6                               | 1            | 28              | 0.63 typ.                     | yes  | SOD80   |
| BB405B                             | 1.8-2.2       | 28             | >7.6                               | 1            | 28              | 0.75                          | yes  | DO-34   |
| BB515                              | 1.85-2.25     | 28             | 8-9.6                              | 1            | 28              | 0.5 typ.                      | yes  | SOD123  |
| BBY31                              | 1.6-2.0       | 28             | 8.3 typ.                           | 1            | 28              | 1.2                           | no   | SOT23   |
| BBY39 <sup>2)</sup>                | 1.6-2.0       | 28             | 8.3 typ.                           | 1            | 28              | 1.2                           | no   | SOT23   |
| BBY62 <sup>1)</sup>                | 1.6-2.0       | 28             | 8.3 typ.                           | 1            | 28              | 1.2                           | no   | SOT143  |
| <b>SHF/SAT-TV tuning</b>           |               |                |                                    |              |                 |                               |  |         |
| BB811                              | 0.85-1.2      | 28             | 7.8-9.5                            | 1            | 28              | 1.45                          | yes  | SOD123  |
| <b>Coupling</b>                    |               |                |                                    |              |                 |                               |  |         |
| BB131                              | 0.7-1.055     | 28             | 12-16                              | 0.5          | 28              | 3.0                           | no   | SOD323  |
| BB901                              | <1.055        | 28             | >12                                | -            | 28              | 3.0                           | no   | SOT23   |

1) double diode

2) common-cathode double diode