

This popular line of Class C discrete devices are characterized for common base amplifier applications in the UHF to S-Band frequency range. These devices are available in a variety of hermetic package style and are often used as drivers in conjunction with higher power matched devices in multi-stage amplifier lineups.

**1000-4000 MHz CLASS C, COMMON BASE, GENERAL PURPOSE**

| PART<br>NUMBER           | FREQ.<br>(GHz) | P <sub>OUT</sub><br>MIN.<br>(W) | P <sub>IN</sub><br>(W) | GAIN<br>MIN.<br>(dB) | $\eta_C$<br>MIN.<br>(%) | V <sub>CC</sub><br>(V) | C <sub>OB</sub><br>MAX.<br>(pF) | R <sub>TH(j-c)</sub><br>MAX.<br>(°C/W) | PACKAGE<br>STYLE |
|--------------------------|----------------|---------------------------------|------------------------|----------------------|-------------------------|------------------------|---------------------------------|--|------------------|
| <a href="#">MSC81002</a> | 1.0            | 2.0                             | 0.20                   | 10.0                 | 50                      | 28                     | 3.2                             | 20                                     | S016             |
| <a href="#">MSC81118</a> | 1.0            | 2.0                             | 0.2                    | 10.0                 | 50                      | 28                     | 3.2                             | 20                                     | S010             |
| <a href="#">MSC81005</a> | 1.0            | 5.0                             | 0.5                    | 10.0                 | 50                      | 28                     | 6.5                             | 8.0                                    | S016             |
| <a href="#">MSC81090</a> | 1.0            | 2.9                             | 0.2                    | 10.0                 | 50                      | 28                     | 3.2                             | 20                                     | S027             |
| <a href="#">MSC81111</a> | 1.0            | 5.0                             | 0.5                    | 10.0                 | 50                      | 28                     | 6.5                             | 8.0                                    | S010             |
| <a href="#">MSC81010</a> | 1.0            | 10                              | 1.0                    | 10.0                 | 60                      | 28                     | 10                              | 6.0                                    | S016             |
| <a href="#">MSC81058</a> | 1.0            | 10                              | 1.0                    | 10.0                 | 60                      | 28                     | 10                              | 6.0                                    | S010             |
| <a href="#">MSC81020</a> | 1.0            | 20                              | 2.0                    | 10.0                 | 55                      | 28                     | 19                              | 5.0                                    | S010             |
| <a href="#">MSC81402</a> | 1.4            | 2.0                             | 0.2                    | 10.0                 | 50                      | 28                     | 3.2                             | 25                                     | S010             |
| <a href="#">MSC81406</a> | 1.4            | 6.0                             | 0.65                   | 9.7                  | 45                      | 28                     | 6.0                             | 10                                     | S010             |
| <a href="#">MSC82001</a> | 2.0            | 1.0                             | 0.20                   | 7.0                  | 35                      | 28                     | 3.2                             | 20                                     | S010             |
| <a href="#">MSC82003</a> | 2.0            | 3.0                             | 0.50                   | 7.8                  | 35                      | 28                     | 9.5                             | 8.0                                    | S010             |
| <a href="#">MSC82005</a> | 2.0            | 5.0                             | 1.0                    | 7.0                  | 35                      | 28                     | 3.2                             | 6.0                                    | S010             |
| <a href="#">MSC82010</a> | 2.0            | 10                              | 3.16                   | 5.0                  | 35                      | 28                     | 6.5                             | 5.0                                    | S010             |
| <a href="#">MSC82302</a> | 2.3            | 1.8                             | 0.18                   | 10.0                 | 40                      | 22                     | 3.5                             | 25                                     | S010             |
| <a href="#">MSC82304</a> | 2.3            | 3.8                             | 0.38                   | 10.0                 | 40                      | 22                     | 5.0                             | 13                                     | S010             |
| <a href="#">MSC82306</a> | 2.3            | 5.5                             | 0.6                    | 9.6                  | 40                      | 22                     | 7.0                             | 9.0                                    | S010             |
| <a href="#">MSC82307</a> | 2.3            | 7.0                             | 0.76                   | 9.6                  | 40                      | 22                     | 8.5                             | 7.0                                    | S010             |
| <a href="#">MSC83301</a> | 3.0            | 1.0                             | 0.20                   | 7.0                  | 33                      | 28                     | 3.5                             | 25                                     | S010             |
| <a href="#">MSC83303</a> | 3.0            | 2.5                             | 0.79                   | 5.0                  | 30                      | 28                     | 5.0                             | 15                                     | S010             |
| <a href="#">MSC83305</a> | 3.0            | 4.5                             | 1.59                   | 4.5                  | 30                      | 28                     | 7.5                             | 8.5                                    | S010             |