

Rset Information

S025W-056C1300 25W Programmable Driver



Programming The Driver Output

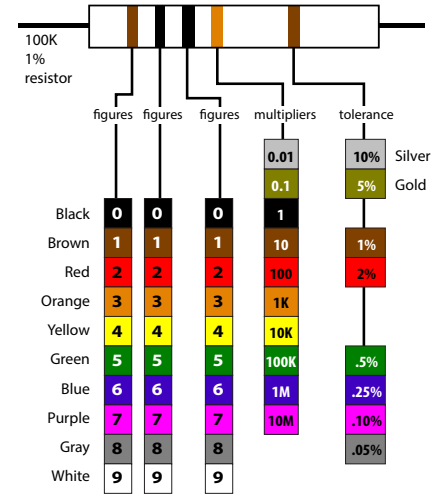
Select resistance (RSET) from the table for required output current (ILED). Connect as shown in the wiring diagram.

Rset Table (full range)

1% EIA E96 Standard Resistor Values vs. Calculated Output Current Nominal Value

| Rset (Ohms) | Iout (mA) | Rset (Ohms) | Iout (mA) | Rset (Ohms) | Iout (mA) | Rset (Ohms) | Iout (mA) | Rset (Ohms) | Iout (mA) | Rset (Ohms) | Iout (mA) | Rset (Ohms) | Iout (mA) | Rset (Ohms) | Iout (mA) |
|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| 100 | 100.9 | 187 | 140.7 | 348 | 210.5 | 649 | 329.4 | 1210 | 518.8 | 2260 | 792.2 | 4870 | 1212.7 | | |
| 102 | 101.8 | 191 | 142.5 | 357 | 214.2 | 665 | 335.4 | 1240 | 528.0 | 2320 | 805.4 | 4990 | 1226.6 | | |
| 105 | 103.2 | 196 | 144.7 | 365 | 217.6 | 681 | 341.3 | 1270 | 537.0 | 2370 | 816.2 | 5110 | 1240.1 | | |
| 107 | 104.1 | 200 | 146.5 | 374 | 221.3 | 698 | 347.5 | 1300 | 545.9 | 2430 | 829.0 | 5230 | 1253.3 | | |
| 110 | 105.5 | 205 | 148.7 | 383 | 225.1 | 715 | 353.7 | 1330 | 554.8 | 2490 | 841.5 | 5360 | 1267.2 | | |
| 113 | 106.9 | 210 | 150.9 | 392 | 228.8 | 732 | 359.9 | 1370 | 566.5 | 2550 | 853.9 | 5490 | 1280.7 | | |
| 115 | 107.9 | 215 | 153.2 | 402 | 232.9 | 750 | 366.4 | 1400 | 575.2 | 2610 | 866.1 | 5620 | 1293.9 | | |
| 118 | 109.2 | 221 | 155.8 | 412 | 237.0 | 768 | 372.8 | 1430 | 583.7 | 2670 | 878.0 | 5760 | 1307.8 | | |
| 121 | 110.6 | 226 | 158.0 | 422 | 241.0 | 787 | 379.6 | 1470 | 595.1 | 2740 | 891.7 | 5900 | 1300.0 | | |
| 124 | 112.0 | 232 | 160.7 | 432 | 245.1 | 806 | 386.3 | 1500 | 603.4 | 2800 | 903.3 | 6000 | 1300.0 | | |
| 127 | 113.4 | 237 | 162.9 | 442 | 249.1 | 825 | 393.0 | 1540 | 614.5 | 2870 | 916.5 | 7000 | GUI SET | | |
| 130 | 114.8 | 243 | 165.5 | 453 | 253.6 | 845 | 399.9 | 1580 | 625.4 | 2940 | 929.5 | | | | |
| 133 | 116.2 | 249 | 168.1 | 464 | 258.0 | 866 | 407.2 | 1620 | 636.2 | 3010 | 942.3 | | | | |
| 137 | 118.0 | 255 | 170.7 | 475 | 262.4 | 887 | 414.4 | 1650 | 644.2 | 3090 | 956.6 | | | | |
| 140 | 119.4 | 261 | 173.3 | 487 | 267.2 | 909 | 421.9 | 1690 | 654.8 | 3160 | 968.9 | | | | |
| 143 | 120.7 | 267 | 175.9 | 499 | 271.9 | 931 | 429.3 | 1740 | 667.8 | 3240 | 982.6 | | | | |
| 147 | 122.6 | 274 | 179.0 | 511 | 276.6 | 953 | 436.7 | 1780 | 678.1 | 3320 | 996.1 | | | | |
| 150 | 123.9 | 280 | 181.6 | 523 | 281.3 | 976 | 444.3 | 1820 | 688.2 | 3400 | 1009.4 | | | | |
| 154 | 125.8 | 287 | 184.6 | 536 | 286.4 | 1000 | 452.2 | 1870 | 700.7 | 3480 | 1022.3 | | | | |
| 158 | 127.6 | 294 | 187.6 | 549 | 291.4 | 1020 | 458.8 | 1910 | 710.6 | 3570 | 1036.6 | | | | |
| 162 | 129.4 | 301 | 190.6 | 562 | 296.5 | 1050 | 468.5 | 1960 | 722.8 | 3650 | 1049.1 | | | | |
| 165 | 130.8 | 309 | 194.0 | 576 | 301.8 | 1070 | 475.0 | 2000 | 732.4 | 3740 | 1062.8 | | | | |
| 169 | 132.6 | 316 | 197.0 | 590 | 307.2 | 1100 | 484.5 | 2050 | 744.3 | 3830 | 1076.2 | | | | |
| 174 | 134.8 | 324 | 200.4 | 604 | 312.5 | 1130 | 494.0 | 2100 | 755.9 | 3920 | 1089.3 | | | | |
| 178 | 136.6 | 332 | 203.8 | 619 | 318.2 | 1150 | 500.3 | 2150 | 767.5 | 4010 | 1102.2 | | | | |
| 182 | 138.4 | 340 | 207.1 | 634 | 323.8 | 1180 | 509.6 | 2210 | 781.1 | 4100 | 1115.2 | | | | |

Reading Resistor Codes



Notes:

1. Minimum wattage resistor rating is 1/4W leaded.
2. Larger wattages can be used for easy installation.
3. RSET best placed in LED engine to avoid field replacement programmability issues.
4. If RSET is placed on LED engine, SMD 0805 size is recommended.

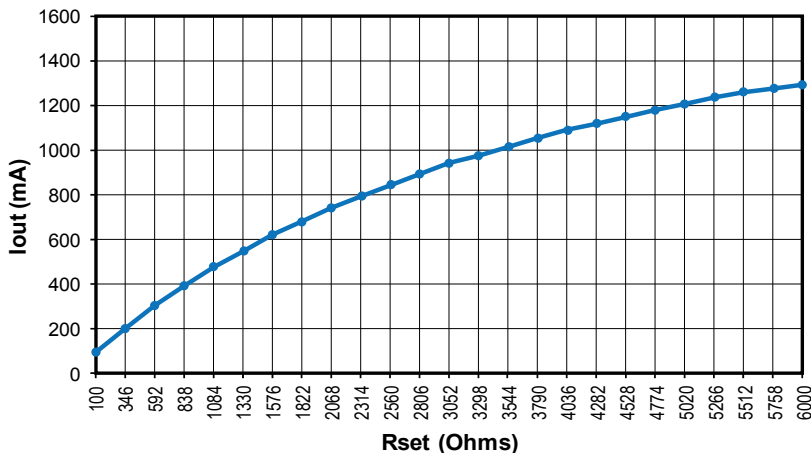
Programmable Output Current

| Rset (Ω) | Iout (mA) |
|----------|-----------|
| 100 | 107 |
| 346 | 209 |
| 592 | 308 |
| 838 | 396 |
| 1084 | 478 |
| 1330 | 554 |
| 1576 | 622 |
| 1822 | 687 |
| 2068 | 745 |
| 2314 | 800 |
| 2560 | 853 |
| 2806 | 899 |
| 3052 | 944 |
| 3298 | 985 |
| 3544 | 1024 |
| 3790 | 1062 |
| 4036 | 1095 |
| 4282 | 1128 |
| 4528 | 1158 |
| 4774 | 1187 |
| 5020 | 1215 |
| 5266 | 1242 |
| 5512 | 1266 |
| 5758 | 1282 |
| 6000 | 1300 |
| 7000 | GUI SET |

POC Setting:

- If Rset is open, SelectSYNC™ Software can be used to set Iout.
- Output Current vs. Rset or GUI value is within ±5%.
- Rset can be any ≥1/4W, ±1%, ≥20V rated resistor.
- Rset >7,000 Ohms will default Iout to GUI setting.

Output Current (mA) vs. Rset (Ohms)



Programming The Driver Output

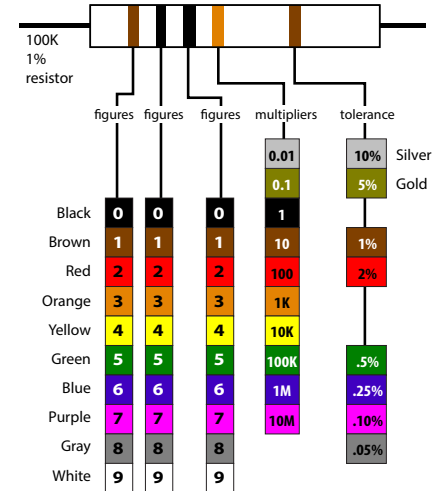
Select resistance (RSET) from the table for required output current (ILED). Connect as shown in the wiring diagram.

Rset Table (full range)

1% EIA E96 Standard Resistor Values vs. Calculated Output Current Nominal Value

| Rset (Ohms) | POC Iout (mA) | Rset (Ohms) | POC Iout (mA) | Rset (Ohms) | POC Iout (mA) | Rset (Ohms) | POC Iout (mA) | Rset (Ohms) | POC Iout (mA) | Rset (Ohms) | POC Iout (mA) | Rset (Ohms) | POC Iout (mA) |
|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|
| 100 | 100.9 | 187 | 140.7 | 348 | 210.5 | 649 | 329.4 | 1210 | 518.8 | 2260 | 792.2 | 4870 | 1212.7 |
| 102 | 101.8 | 191 | 142.5 | 357 | 214.2 | 665 | 335.4 | 1240 | 528.0 | 2320 | 805.4 | 4990 | 1226.6 |
| 105 | 103.2 | 196 | 144.7 | 365 | 217.6 | 681 | 341.3 | 1270 | 537.0 | 2370 | 816.2 | 5110 | 1240.1 |
| 107 | 104.1 | 200 | 146.5 | 374 | 221.3 | 698 | 347.5 | 1300 | 545.9 | 2430 | 829.0 | 5230 | 1253.3 |
| 110 | 105.5 | 205 | 148.7 | 383 | 225.1 | 715 | 353.7 | 1330 | 554.8 | 2490 | 841.5 | 5360 | 1267.2 |
| 113 | 106.9 | 210 | 150.9 | 392 | 228.8 | 732 | 359.9 | 1370 | 566.5 | 2550 | 853.9 | 5490 | 1280.7 |
| 115 | 107.9 | 215 | 153.2 | 402 | 232.9 | 750 | 366.4 | 1400 | 575.2 | 2610 | 866.1 | 5620 | 1293.9 |
| 118 | 109.2 | 221 | 155.8 | 412 | 237.0 | 768 | 372.8 | 1430 | 583.7 | 2670 | 878.0 | 5760 | 1307.8 |
| 121 | 110.6 | 226 | 158.0 | 422 | 241.0 | 787 | 379.6 | 1470 | 595.1 | 2740 | 891.7 | 5900 | 1321.2 |
| 124 | 112.0 | 232 | 160.7 | 432 | 245.1 | 806 | 386.3 | 1500 | 603.4 | 2800 | 903.3 | 6040 | 1334.4 |
| 127 | 113.4 | 237 | 162.9 | 442 | 249.1 | 825 | 393.0 | 1540 | 614.5 | 2870 | 916.5 | 6190 | 1348.0 |
| 130 | 114.8 | 243 | 165.5 | 453 | 253.6 | 845 | 399.9 | 1580 | 625.4 | 2940 | 929.5 | 6340 | 1361.3 |
| 133 | 116.2 | 249 | 168.1 | 464 | 258.0 | 866 | 407.2 | 1620 | 636.2 | 3010 | 942.3 | 6490 | 1374.2 |
| 137 | 118.0 | 255 | 170.7 | 475 | 262.4 | 887 | 414.4 | 1650 | 644.2 | 3090 | 956.6 | 6650 | 1387.6 |
| 140 | 119.4 | 261 | 173.3 | 487 | 267.2 | 909 | 421.9 | 1690 | 654.8 | 3160 | 968.9 | 6810 | 1400.7 |
| 143 | 120.7 | 267 | 175.9 | 499 | 271.9 | 931 | 429.3 | 1740 | 667.8 | 3240 | 982.6 | 6980 | 1414.1 |
| 147 | 122.6 | 274 | 179.0 | 511 | 276.6 | 953 | 436.7 | 1780 | 678.1 | 3320 | 996.1 | 7150 | 1427.2 |
| 150 | 123.9 | 280 | 181.6 | 523 | 281.3 | 976 | 444.3 | 1820 | 688.2 | 3400 | 1009.4 | 7320 | 1439.8 |
| 154 | 125.8 | 287 | 184.6 | 536 | 286.4 | 1000 | 452.2 | 1870 | 700.7 | 3480 | 1022.3 | 7500 | 1452.8 |
| 158 | 127.6 | 294 | 187.6 | 549 | 291.4 | 1020 | 458.8 | 1910 | 710.6 | 3570 | 1036.6 | 7680 | 1465.5 |
| 162 | 129.4 | 301 | 190.6 | 562 | 296.5 | 1050 | 468.5 | 1960 | 722.8 | 3650 | 1049.1 | 7870 | 1478.4 |
| 165 | 130.8 | 309 | 194.0 | 576 | 301.8 | 1070 | 475.0 | 2000 | 732.4 | 3740 | 1062.8 | 8060 | 1490.9 |
| 169 | 132.6 | 316 | 197.0 | 590 | 307.2 | 1100 | 484.5 | 2050 | 744.3 | 3830 | 1076.2 | 8200 | 1500.0 |
| 174 | 134.8 | 324 | 200.4 | 604 | 312.5 | 1130 | 494.0 | 2100 | 755.9 | 3920 | 1089.3 | 10000 | GUI SET |
| 178 | 136.6 | 332 | 203.8 | 619 | 318.2 | 1150 | 500.3 | 2150 | 767.5 | 4010 | 1102.2 | | |
| 182 | 138.4 | 340 | 207.1 | 634 | 323.8 | 1180 | 509.6 | 2210 | 781.1 | 4100 | 1115.2 | | |

Reading Resistor Codes



Programmable Output Current

| Rset (Ω) | Iout (mA) |
|----------|-----------|
| 100 | 131 |
| 504 | 295 |
| 908 | 441 |
| 1312 | 558 |
| 1716 | 673 |
| 2120 | 760 |
| 2524 | 846 |
| 2928 | 922 |
| 3332 | 992 |
| 3736 | 1055 |
| 4140 | 1110 |
| 4544 | 1160 |
| 4948 | 1205 |
| 5352 | 1246 |
| 5756 | 1287 |
| 6160 | 1318 |
| 6564 | 1349 |
| 6968 | 1380 |
| 7372 | 1407 |
| 7776 | 1435 |
| 8180 | 1470 |
| 8584 | 1500 |
| 8988 | 1500 |
| 9392 | 1500 |
| 10000 | GUI SET |

POC Setting:

- If Rset is open, TRP Programmer GUI can be used to set Iout.
- Output Current vs. Rset or GUI value is within ±5%.
- Rset can be any ≥1/4W, ±1%, ≥20V rated resistor.
- Rset >9,900 Ohms will default Iout to GUI setting.

Notes:

1. Minimum wattage resistor rating is 1/4W leaded.
2. Larger wattages can be used for easy installation.
3. RSET best placed in LED engine to avoid field replacement programmability issues.
4. If RSET is placed on LED engine, SMD 0805 size is recommended.

Output Current (mA) vs. Rset (Ohms)

