



Technical Information Data Bulletin

Platinum 100 Ohms (Pt100)

α 0.00385

Temperature vs Resistance Table Resistance @ 32°F

Temperature Range
-320 to 1562°F
-200 to 850°C

Accuracy:
Grade A Tolerance = $\pm[0.13 + 0.0017 * |t|]$ °C
Grade B tolerance = $\pm[0.25 + 0.0042 * |t|]$ °C

Recommended Applications:
Where higher accuracy is needed in general purpose and industrial application.

| Temp | 0 | -1 | -2 | -3 | -4 | -5 | -6 | -7 | -8 | -9 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| -320 | 20.438 | 20.199 | 19.959 | 19.720 | 19.480 | 19.240 | 19.000 | 18.760 | 18.520 | |
| -310 | 22.826 | 22.587 | 22.349 | 22.110 | 21.872 | 21.633 | 21.394 | 21.155 | 20.916 | 20.677 |
| -300 | 25.202 | 24.965 | 24.728 | 24.490 | 24.253 | 24.015 | 23.778 | 23.540 | 23.302 | 23.064 |
| -290 | 27.569 | 27.333 | 27.096 | 26.860 | 26.624 | 26.387 | 26.150 | 25.913 | 25.677 | 25.440 |
| -280 | 29.926 | 29.690 | 29.455 | 29.220 | 28.984 | 28.749 | 28.513 | 28.277 | 28.041 | 27.805 |
| -270 | 32.273 | 32.039 | 31.804 | 31.570 | 31.335 | 31.100 | 30.866 | 30.631 | 30.396 | 30.161 |
| -260 | 34.611 | 34.377 | 34.144 | 33.910 | 33.677 | 33.443 | 33.209 | 32.975 | 32.741 | 32.507 |
| -250 | 36.940 | 36.707 | 36.475 | 36.242 | 36.009 | 35.776 | 35.543 | 35.310 | 35.077 | 34.844 |
| -240 | 39.260 | 39.028 | 38.797 | 38.565 | 38.333 | 38.101 | 37.869 | 37.637 | 37.404 | 37.172 |
| -230 | 41.572 | 41.341 | 41.111 | 40.880 | 40.648 | 40.417 | 40.186 | 39.955 | 39.723 | 39.492 |
| -220 | 43.876 | 43.646 | 43.416 | 43.186 | 42.956 | 42.725 | 42.495 | 42.264 | 42.034 | 41.803 |
| -210 | 46.173 | 45.944 | 45.714 | 45.485 | 45.255 | 45.026 | 44.796 | 44.566 | 44.336 | 44.106 |
| -200 | 48.462 | 48.233 | 48.005 | 47.776 | 47.547 | 47.318 | 47.089 | 46.860 | 46.631 | 46.402 |
| -190 | 50.744 | 50.516 | 50.288 | 50.060 | 49.832 | 49.604 | 49.376 | 49.147 | 48.919 | 48.691 |
| -180 | 53.019 | 52.792 | 52.565 | 52.337 | 52.110 | 51.882 | 51.655 | 51.427 | 51.200 | 50.972 |
| -170 | 55.287 | 55.061 | 54.834 | 54.608 | 54.381 | 54.154 | 53.927 | 53.700 | 53.473 | 53.246 |
| -160 | 57.550 | 57.324 | 57.098 | 56.872 | 56.645 | 56.419 | 56.193 | 55.967 | 55.740 | 55.514 |
| -150 | 59.805 | 59.580 | 59.355 | 59.129 | 58.904 | 58.678 | 58.453 | 58.227 | 58.001 | 57.775 |
| -140 | 62.055 | 61.831 | 61.606 | 61.381 | 61.156 | 60.931 | 60.706 | 60.481 | 60.256 | 60.031 |
| -130 | 64.300 | 64.075 | 63.851 | 63.627 | 63.403 | 63.178 | 62.954 | 62.729 | 62.505 | 62.280 |
| -120 | 66.538 | 66.315 | 66.091 | 65.867 | 65.644 | 65.420 | 65.196 | 64.972 | 64.748 | 64.524 |
| -110 | 68.772 | 68.549 | 68.325 | 68.102 | 67.879 | 67.656 | 67.432 | 67.209 | 66.985 | 66.762 |
| -100 | 71.000 | 70.777 | 70.555 | 70.332 | 70.109 | 69.887 | 69.664 | 69.441 | 69.218 | 68.995 |
| -90 | 73.223 | 73.001 | 72.779 | 72.557 | 72.335 | 72.112 | 71.890 | 71.668 | 71.445 | 71.223 |
| -80 | 75.442 | 75.220 | 74.998 | 74.777 | 74.555 | 74.333 | 74.111 | 73.889 | 73.667 | 73.445 |
| -70 | 77.656 | 77.434 | 77.213 | 76.992 | 76.771 | 76.549 | 76.328 | 76.106 | 75.885 | 75.663 |
| -60 | 79.865 | 79.644 | 79.423 | 79.203 | 78.982 | 78.761 | 78.540 | 78.319 | 78.098 | 77.877 |
| -50 | 82.070 | 81.850 | 81.629 | 81.409 | 81.188 | 80.968 | 80.747 | 80.527 | 80.306 | 80.086 |
| -40 | 84.271 | 84.051 | 83.831 | 83.611 | 83.391 | 83.171 | 82.951 | 82.731 | 82.510 | 82.290 |
| -30 | 86.467 | 86.248 | 86.028 | 85.809 | 85.589 | 85.370 | 85.150 | 84.930 | 84.710 | 84.491 |
| -20 | 88.660 | 88.441 | 88.222 | 88.003 | 87.783 | 87.564 | 87.345 | 87.126 | 86.906 | 86.687 |
| -10 | 90.849 | 90.630 | 90.411 | 90.192 | 89.974 | 89.755 | 89.536 | 89.317 | 89.098 | 88.879 |
| 0 | 93.033 | 92.815 | 92.597 | 92.378 | 92.160 | 91.941 | 91.723 | 91.504 | 91.286 | 91.067 |
| Temp | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | 93.033 | 93.252 | 93.470 | 93.688 | 93.906 | 94.124 | 94.343 | 94.561 | 94.779 | 94.997 |
| 10 | 95.215 | 95.432 | 95.650 | 95.868 | 96.086 | 96.304 | 96.521 | 96.739 | 96.957 | 97.174 |
| 20 | 97.392 | 97.609 | 97.827 | 98.044 | 98.262 | 98.479 | 98.697 | 98.914 | 99.131 | 99.349 |
| 30 | 99.566 | 99.783 | 100.000 | 100.217 | 100.434 | 100.651 | 100.868 | 101.085 | 101.302 | 101.519 |
| 40 | 101.736 | 101.953 | 102.169 | 102.386 | 102.603 | 102.820 | 103.036 | 103.253 | 103.469 | 103.686 |
| 50 | 103.903 | 104.119 | 104.335 | 104.552 | 104.768 | 104.985 | 105.201 | 105.417 | 105.633 | 105.849 |
| 60 | 106.066 | 106.282 | 106.498 | 106.714 | 106.930 | 107.146 | 107.362 | 107.578 | 107.794 | 108.009 |
| 70 | 108.225 | 108.441 | 108.657 | 108.872 | 109.088 | 109.304 | 109.519 | 109.735 | 109.950 | 110.166 |
| 80 | 110.381 | 110.596 | 110.812 | 111.027 | 111.242 | 111.458 | 111.673 | 111.888 | 112.103 | 112.318 |
| 90 | 112.533 | 112.748 | 112.963 | 113.178 | 113.393 | 113.608 | 113.823 | 114.038 | 114.253 | 114.468 |
| 100 | 114.682 | 114.897 | 115.112 | 115.326 | 115.541 | 115.755 | 115.970 | 116.184 | 116.399 | 116.613 |
| 110 | 116.828 | 117.042 | 117.256 | 117.470 | 117.685 | 117.899 | 118.113 | 118.327 | 118.541 | 118.755 |
| 120 | 118.969 | 119.183 | 119.397 | 119.611 | 119.825 | 120.039 | 120.253 | 120.466 | 120.680 | 120.894 |
| 130 | 121.107 | 121.321 | 121.535 | 121.748 | 121.962 | 122.175 | 122.389 | 122.602 | 122.815 | 123.029 |
| 140 | 123.242 | 123.455 | 123.668 | 123.882 | 124.095 | 124.308 | 124.521 | 124.734 | 124.947 | 125.160 |
| 150 | 125.373 | 125.586 | 125.799 | 126.011 | 126.224 | 126.437 | 126.650 | 126.862 | 127.075 | 127.288 |
| 160 | 127.500 | 127.713 | 127.925 | 128.138 | 128.350 | 128.563 | 128.775 | 128.987 | 129.200 | 129.412 |

TEMPERATURE & PROCESS INSTRUMENTS - CON



Technical Information Data Bulletin

Platinum 100 Ohms (Pt100)

α 0.00385

Temperature vs Resistance Table Resistance @ 32°F

Temperature Range
-320 to 1562°F
-200 to 850°C

Accuracy:
Grade A Tolerance = $\pm[0.13 + 0.0017 * |t|]$ °C
Grade B tolerance = $\pm[0.25 + 0.0042 * |t|]$ °C

Recommended Applications:

Where higher accuracy is needed in general purpose and industrial application.

| Temp | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 170 | 129.624 | 129.836 | 130.049 | 130.261 | 130.473 | 130.685 | 130.897 | 131.109 | 131.321 | 131.533 |
| 180 | 131.744 | 131.956 | 132.168 | 132.380 | 132.592 | 132.803 | 133.015 | 133.227 | 133.438 | 133.650 |
| 190 | 133.861 | 134.073 | 134.284 | 134.496 | 134.707 | 134.918 | 135.130 | 135.341 | 135.552 | 135.763 |
| 200 | 135.974 | 136.186 | 136.397 | 136.608 | 136.819 | 137.030 | 137.241 | 137.451 | 137.662 | 137.873 |
| 210 | 138.084 | 138.295 | 138.505 | 138.716 | 138.927 | 139.137 | 139.348 | 139.559 | 139.769 | 139.980 |
| 220 | 140.190 | 140.400 | 140.611 | 140.821 | 141.031 | 141.242 | 141.452 | 141.662 | 141.872 | 142.082 |
| 230 | 142.293 | 142.503 | 142.713 | 142.923 | 143.133 | 143.342 | 143.552 | 143.762 | 143.972 | 144.182 |
| 240 | 144.391 | 144.601 | 144.811 | 145.020 | 145.230 | 145.440 | 145.649 | 145.859 | 146.068 | 146.277 |
| 250 | 146.487 | 146.696 | 146.905 | 147.115 | 147.324 | 147.533 | 147.742 | 147.951 | 148.160 | 148.370 |
| 260 | 148.579 | 148.788 | 148.996 | 149.205 | 149.414 | 149.623 | 149.832 | 150.041 | 150.249 | 150.458 |
| 270 | 150.667 | 150.875 | 151.084 | 151.293 | 151.501 | 151.710 | 151.918 | 152.126 | 152.335 | 152.543 |
| 280 | 152.751 | 152.960 | 153.168 | 153.376 | 153.584 | 153.792 | 154.001 | 154.209 | 154.417 | 154.625 |
| 290 | 154.833 | 155.040 | 155.248 | 155.456 | 155.664 | 155.872 | 156.079 | 156.287 | 156.495 | 156.702 |
| 300 | 156.910 | 157.118 | 157.325 | 157.533 | 157.740 | 157.947 | 158.155 | 158.362 | 158.569 | 158.777 |
| 310 | 158.984 | 159.191 | 159.398 | 159.605 | 159.813 | 160.020 | 160.227 | 160.434 | 160.641 | 160.848 |
| 320 | 161.054 | 161.261 | 161.468 | 161.675 | 161.882 | 162.088 | 162.295 | 162.502 | 162.708 | 162.915 |
| 330 | 163.121 | 163.328 | 163.534 | 163.741 | 163.947 | 164.153 | 164.360 | 164.566 | 164.772 | 164.978 |
| 340 | 165.184 | 165.391 | 165.597 | 165.803 | 166.009 | 166.215 | 166.421 | 166.627 | 166.833 | 167.038 |
| 350 | 167.244 | 167.450 | 167.656 | 167.861 | 168.067 | 168.273 | 168.478 | 168.684 | 168.889 | 169.095 |
| 360 | 169.300 | 169.506 | 169.711 | 169.916 | 170.122 | 170.327 | 170.532 | 170.737 | 170.943 | 171.148 |
| 370 | 171.353 | 171.558 | 171.763 | 171.968 | 172.173 | 172.378 | 172.583 | 172.788 | 172.992 | 173.197 |
| 380 | 173.402 | 173.607 | 173.811 | 174.016 | 174.221 | 174.425 | 174.630 | 174.834 | 175.039 | 175.243 |
| 390 | 175.447 | 175.652 | 175.856 | 176.060 | 176.265 | 176.469 | 176.673 | 176.877 | 177.081 | 177.285 |
| 400 | 177.489 | 177.693 | 177.897 | 178.101 | 178.305 | 178.509 | 178.713 | 178.916 | 179.120 | 179.324 |
| 410 | 179.528 | 179.731 | 179.935 | 180.138 | 180.342 | 180.545 | 180.749 | 180.952 | 181.156 | 181.359 |
| 420 | 181.562 | 181.766 | 181.969 | 182.172 | 182.375 | 182.578 | 182.781 | 182.984 | 183.188 | 183.390 |
| 430 | 183.593 | 183.796 | 183.999 | 184.202 | 184.405 | 184.608 | 184.810 | 185.013 | 185.216 | 185.418 |
| 440 | 185.621 | 185.824 | 186.026 | 186.229 | 186.431 | 186.634 | 186.836 | 187.038 | 187.241 | 187.443 |
| 450 | 187.645 | 187.847 | 188.049 | 188.252 | 188.454 | 188.656 | 188.858 | 189.060 | 189.262 | 189.464 |
| 460 | 189.666 | 189.867 | 190.069 | 190.271 | 190.473 | 190.675 | 190.876 | 191.078 | 191.279 | 191.481 |
| 470 | 191.683 | 191.884 | 192.085 | 192.287 | 192.488 | 192.690 | 192.891 | 193.092 | 193.293 | 193.495 |
| 480 | 193.696 | 193.897 | 194.098 | 194.299 | 194.500 | 194.701 | 194.902 | 195.103 | 195.304 | 195.505 |
| 490 | 195.706 | 195.906 | 196.107 | 196.308 | 196.509 | 196.709 | 196.910 | 197.110 | 197.311 | 197.511 |
| 500 | 197.712 | 197.912 | 198.113 | 198.313 | 198.513 | 198.714 | 198.914 | 199.114 | 199.314 | 199.514 |
| 510 | 199.715 | 199.915 | 200.115 | 200.315 | 200.515 | 200.715 | 200.914 | 201.114 | 201.314 | 201.514 |
| 520 | 201.714 | 201.913 | 202.113 | 202.313 | 202.512 | 202.712 | 202.911 | 203.111 | 203.310 | 203.510 |
| 530 | 203.709 | 203.909 | 204.108 | 204.307 | 204.506 | 204.706 | 204.905 | 205.104 | 205.303 | 205.502 |
| 540 | 205.701 | 205.900 | 206.099 | 206.298 | 206.497 | 206.696 | 206.895 | 207.093 | 207.292 | 207.491 |
| 550 | 207.690 | 207.888 | 208.087 | 208.285 | 208.484 | 208.682 | 208.881 | 209.079 | 209.278 | 209.476 |
| 560 | 209.674 | 209.873 | 210.071 | 210.269 | 210.467 | 210.665 | 210.864 | 211.062 | 211.260 | 211.458 |
| 570 | 211.656 | 211.854 | 212.052 | 212.249 | 212.447 | 212.645 | 212.843 | 213.040 | 213.238 | 213.436 |
| 580 | 213.633 | 213.831 | 214.028 | 214.226 | 214.423 | 214.621 | 214.818 | 215.016 | 215.213 | 215.410 |
| 590 | 215.608 | 215.805 | 216.002 | 216.199 | 216.396 | 216.593 | 216.790 | 216.987 | 217.184 | 217.381 |
| 600 | 217.578 | 217.775 | 217.972 | 218.169 | 218.365 | 218.562 | 218.759 | 218.955 | 219.152 | 219.349 |
| 610 | 219.545 | 219.742 | 219.938 | 220.135 | 220.331 | 220.527 | 220.724 | 220.920 | 221.116 | 221.312 |
| 620 | 221.509 | 221.705 | 221.901 | 222.097 | 222.293 | 222.489 | 222.685 | 222.881 | 223.077 | 223.273 |
| 630 | 223.468 | 223.664 | 223.860 | 224.056 | 224.251 | 224.447 | 224.643 | 224.838 | 225.034 | 225.229 |
| 640 | 225.425 | 225.620 | 225.816 | 226.011 | 226.206 | 226.402 | 226.597 | 226.792 | 226.987 | 227.182 |
| 650 | 227.378 | 227.573 | 227.768 | 227.963 | 228.158 | 228.353 | 228.547 | 228.742 | 228.937 | 229.132 |
| 660 | 229.327 | 229.521 | 229.716 | 229.911 | 230.105 | 230.300 | 230.495 | 230.689 | 230.884 | 231.078 |
| 670 | 231.272 | 231.467 | 231.661 | 231.855 | 232.050 | 232.244 | 232.438 | 232.632 | 232.826 | 233.020 |

TEMPERATURE & PROCESS INSTRUMENTS - CON



Technical Information Data Bulletin

Platinum 100 Ohms (Pt100)

α 0.00385

TEMPERATURE & PROCESS INSTRUMENTS - CON-

Temperature vs Resistance Table Resistance @ 32°F

Temperature Range
-320 to 1562°F
-200 to 850°C

Accuracy:
Grade A Tolerance = $\pm[0.13 + 0.0017 * |t|]$ °C
Grade B tolerance = $\pm[0.25 + 0.0042 * |t|]$ °C

Recommended Applications:
Where higher accuracy is needed in general purpose and industrial application.

| Temp | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 680 | 233.214 | 233.408 | 233.602 | 233.796 | 233.990 | 234.184 | 234.378 | 234.572 | 234.765 | 234.959 |
| 690 | 235.153 | 235.347 | 235.540 | 235.734 | 235.927 | 236.121 | 236.314 | 236.508 | 236.701 | 236.894 |
| 700 | 237.088 | 237.281 | 237.474 | 237.668 | 237.861 | 238.054 | 238.247 | 238.440 | 238.633 | 238.826 |
| 710 | 239.019 | 239.212 | 239.405 | 239.598 | 239.791 | 239.984 | 240.176 | 240.369 | 240.562 | 240.754 |
| 720 | 240.947 | 241.140 | 241.332 | 241.525 | 241.717 | 241.910 | 242.102 | 242.294 | 242.487 | 242.679 |
| 730 | 242.871 | 243.063 | 243.256 | 243.448 | 243.640 | 243.832 | 244.024 | 244.216 | 244.408 | 244.600 |
| 740 | 244.792 | 244.984 | 245.176 | 245.367 | 245.559 | 245.751 | 245.943 | 246.134 | 246.326 | 246.517 |
| 750 | 246.709 | 246.901 | 247.092 | 247.283 | 247.475 | 247.666 | 247.858 | 248.049 | 248.240 | 248.431 |
| 760 | 248.623 | 248.814 | 249.005 | 249.196 | 249.387 | 249.578 | 249.769 | 249.960 | 250.151 | 250.342 |
| 770 | 250.533 | 250.723 | 250.914 | 251.105 | 251.296 | 251.486 | 251.677 | 251.867 | 252.058 | 252.248 |
| 780 | 252.439 | 252.629 | 252.820 | 253.010 | 253.201 | 253.391 | 253.581 | 253.771 | 253.962 | 254.152 |
| 790 | 254.342 | 254.532 | 254.722 | 254.912 | 255.102 | 255.292 | 255.482 | 255.672 | 255.861 | 256.051 |
| 800 | 256.241 | 256.431 | 256.620 | 256.810 | 257.000 | 257.189 | 257.379 | 257.568 | 257.758 | 257.947 |
| 810 | 258.137 | 258.326 | 258.515 | 258.705 | 258.894 | 259.083 | 259.273 | 259.462 | 259.651 | 259.840 |
| 820 | 260.029 | 260.218 | 260.407 | 260.596 | 260.785 | 260.974 | 261.163 | 261.351 | 261.540 | 261.729 |
| 830 | 261.918 | 262.106 | 262.295 | 262.483 | 262.672 | 262.860 | 263.049 | 263.237 | 263.426 | 263.614 |
| 840 | 263.803 | 263.991 | 264.179 | 264.367 | 264.556 | 264.744 | 264.932 | 265.120 | 265.308 | 265.496 |
| 850 | 265.684 | 265.872 | 266.060 | 266.248 | 266.436 | 266.623 | 266.811 | 266.999 | 267.187 | 267.374 |
| 860 | 267.562 | 267.749 | 267.937 | 268.125 | 268.312 | 268.500 | 268.687 | 268.874 | 269.062 | 269.249 |
| 870 | 269.436 | 269.623 | 269.811 | 269.998 | 270.185 | 270.372 | 270.559 | 270.746 | 270.933 | 271.120 |
| 880 | 271.307 | 271.494 | 271.681 | 271.868 | 272.054 | 272.241 | 272.428 | 272.614 | 272.801 | 272.988 |
| 890 | 273.174 | 273.361 | 273.547 | 273.734 | 273.920 | 274.106 | 274.293 | 274.479 | 274.665 | 274.852 |
| 900 | 275.038 | 275.224 | 275.410 | 275.596 | 275.782 | 275.968 | 276.154 | 276.340 | 276.526 | 276.712 |
| 910 | 276.898 | 277.084 | 277.269 | 277.455 | 277.641 | 277.827 | 278.012 | 278.198 | 278.383 | 278.569 |
| 920 | 278.754 | 278.940 | 279.125 | 279.311 | 279.496 | 279.681 | 279.867 | 280.052 | 280.237 | 280.422 |
| 930 | 280.607 | 280.792 | 280.978 | 281.163 | 281.348 | 281.532 | 281.717 | 281.902 | 282.087 | 282.272 |
| 940 | 282.457 | 282.641 | 282.826 | 283.011 | 283.195 | 283.380 | 283.565 | 283.749 | 283.934 | 284.118 |
| 950 | 284.303 | 284.487 | 284.671 | 284.856 | 285.040 | 285.224 | 285.408 | 285.592 | 285.777 | 285.961 |
| 960 | 286.145 | 286.329 | 286.513 | 286.697 | 286.881 | 287.065 | 287.248 | 287.432 | 287.616 | 287.800 |
| 970 | 287.983 | 288.167 | 288.351 | 288.534 | 288.718 | 288.901 | 289.085 | 289.268 | 289.452 | 289.635 |
| 980 | 289.819 | 290.002 | 290.185 | 290.368 | 290.552 | 290.735 | 290.918 | 291.101 | 291.284 | 291.467 |
| 990 | 291.650 | 291.833 | 292.016 | 292.199 | 292.382 | 292.565 | 292.747 | 292.930 | 293.113 | 293.295 |
| 1000 | 293.478 | 293.661 | 293.843 | 294.026 | 294.208 | 294.391 | 294.573 | 294.756 | 294.938 | 295.120 |
| 1010 | 295.303 | 295.485 | 295.667 | 295.849 | 296.031 | 296.213 | 296.395 | 296.577 | 296.759 | 296.941 |
| 1020 | 297.123 | 297.305 | 297.487 | 297.669 | 297.851 | 298.032 | 298.214 | 298.396 | 298.578 | 298.759 |
| 1030 | 298.941 | 299.122 | 299.304 | 299.485 | 299.667 | 299.848 | 300.029 | 300.211 | 300.392 | 300.573 |
| 1040 | 300.754 | 300.936 | 301.117 | 301.298 | 301.479 | 301.660 | 301.841 | 302.022 | 302.203 | 302.384 |
| 1050 | 302.565 | 302.745 | 302.926 | 303.107 | 303.288 | 303.468 | 303.649 | 303.830 | 304.010 | 304.191 |
| 1060 | 304.371 | 304.552 | 304.732 | 304.912 | 305.093 | 305.273 | 305.453 | 305.634 | 305.814 | 305.994 |
| 1070 | 306.174 | 306.354 | 306.534 | 306.714 | 306.894 | 307.074 | 307.254 | 307.434 | 307.614 | 307.794 |
| 1080 | 307.974 | 308.153 | 308.333 | 308.513 | 308.692 | 308.872 | 309.052 | 309.231 | 309.411 | 309.590 |
| 1090 | 309.770 | 309.949 | 310.128 | 310.308 | 310.487 | 310.666 | 310.845 | 311.025 | 311.204 | 311.383 |
| 1100 | 311.562 | 311.741 | 311.920 | 312.099 | 312.278 | 312.457 | 312.636 | 312.814 | 312.993 | 313.172 |
| 1110 | 313.351 | 313.529 | 313.708 | 313.887 | 314.065 | 314.244 | 314.422 | 314.601 | 314.779 | 314.958 |
| 1120 | 315.136 | 315.314 | 315.492 | 315.671 | 315.849 | 316.027 | 316.205 | 316.383 | 316.561 | 316.740 |
| 1130 | 316.918 | 317.095 | 317.273 | 317.451 | 317.629 | 317.807 | 317.985 | 318.163 | 318.340 | 318.518 |
| 1140 | 318.696 | 318.873 | 319.051 | 319.228 | 319.406 | 319.583 | 319.761 | 319.938 | 320.115 | 320.293 |
| 1150 | 320.470 | 320.647 | 320.825 | 321.002 | 321.179 | 321.356 | 321.533 | 321.710 | 321.887 | 322.064 |
| 1160 | 322.241 | 322.418 | 322.595 | 322.772 | 322.948 | 323.125 | 323.302 | 323.479 | 323.655 | 323.832 |
| 1170 | 324.008 | 324.185 | 324.362 | 324.538 | 324.714 | 324.891 | 325.067 | 325.243 | 325.420 | 325.596 |
| 1180 | 325.772 | 325.948 | 326.125 | 326.301 | 326.477 | 326.653 | 326.829 | 327.005 | 327.181 | 327.357 |



Technical Information Data Bulletin

Platinum 100 Ohms (Pt100)

α 0.00385

Temperature vs Resistance Table Resistance @ 32°F

Temperature Range
-320 to 1562°F
-200 to 850°C

Accuracy:
Grade A Tolerance = $\pm[0.13 + 0.0017 * |t|]$ °C
Grade B tolerance = $\pm[0.25 + 0.0042 * |t|]$ °C

Recommended Applications:

Where higher accuracy is needed in general purpose and industrial application.

| Temp | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1190 | 327.533 | 327.708 | 327.884 | 328.060 | 328.236 | 328.411 | 328.587 | 328.763 | 328.938 | 329.114 |
| 1200 | 329.289 | 329.465 | 329.640 | 329.816 | 329.991 | 330.166 | 330.342 | 330.517 | 330.692 | 330.867 |
| 1210 | 331.042 | 331.217 | 331.393 | 331.568 | 331.743 | 331.918 | 332.093 | 332.267 | 332.442 | 332.617 |
| 1220 | 332.792 | 332.967 | 333.141 | 333.316 | 333.491 | 333.665 | 333.840 | 334.014 | 334.189 | 334.363 |
| 1230 | 334.538 | 334.712 | 334.887 | 335.061 | 335.235 | 335.410 | 335.584 | 335.758 | 335.932 | 336.106 |
| 1240 | 336.280 | 336.454 | 336.628 | 336.802 | 336.976 | 337.150 | 337.324 | 337.498 | 337.672 | 337.845 |
| 1250 | 338.019 | 338.193 | 338.367 | 338.540 | 338.714 | 338.887 | 339.061 | 339.234 | 339.408 | 339.581 |
| 1260 | 339.754 | 339.928 | 340.101 | 340.274 | 340.448 | 340.621 | 340.794 | 340.967 | 341.140 | 341.313 |
| 1270 | 341.486 | 341.659 | 341.832 | 342.005 | 342.178 | 342.351 | 342.524 | 342.696 | 342.869 | 343.042 |
| 1280 | 343.214 | 343.387 | 343.560 | 343.732 | 343.905 | 344.077 | 344.250 | 344.422 | 344.594 | 344.767 |
| 1290 | 344.939 | 345.111 | 345.284 | 345.456 | 345.628 | 345.800 | 345.972 | 346.144 | 346.316 | 346.488 |
| 1300 | 346.660 | 346.832 | 347.004 | 347.176 | 347.347 | 347.519 | 347.691 | 347.863 | 348.034 | 348.206 |
| 1310 | 348.378 | 348.549 | 348.721 | 348.892 | 349.064 | 349.235 | 349.406 | 349.578 | 349.749 | 349.920 |
| 1320 | 350.091 | 350.263 | 350.434 | 350.605 | 350.776 | 350.947 | 351.118 | 351.289 | 351.460 | 351.631 |
| 1330 | 351.802 | 351.973 | 352.143 | 352.314 | 352.485 | 352.656 | 352.826 | 352.997 | 353.167 | 353.338 |
| 1340 | 353.509 | 353.679 | 353.849 | 354.020 | 354.190 | 354.361 | 354.531 | 354.701 | 354.871 | 355.042 |
| 1350 | 355.212 | 355.382 | 355.552 | 355.722 | 355.892 | 356.062 | 356.232 | 356.402 | 356.572 | 356.742 |
| 1360 | 356.911 | 357.081 | 357.251 | 357.421 | 357.590 | 357.760 | 357.930 | 358.099 | 358.269 | 358.438 |
| 1370 | 358.608 | 358.777 | 358.946 | 359.116 | 359.285 | 359.454 | 359.623 | 359.793 | 359.962 | 360.131 |
| 1380 | 360.300 | 360.469 | 360.638 | 360.807 | 360.976 | 361.145 | 361.314 | 361.483 | 361.651 | 361.820 |
| 1390 | 361.989 | 362.158 | 362.326 | 362.495 | 362.664 | 362.832 | 363.001 | 363.169 | 363.338 | 363.506 |
| 1400 | 363.674 | 363.843 | 364.011 | 364.179 | 364.348 | 364.516 | 364.684 | 364.852 | 365.020 | 365.188 |
| 1410 | 365.356 | 365.524 | 365.692 | 365.860 | 366.028 | 366.196 | 366.364 | 366.531 | 366.699 | 366.867 |
| 1420 | 367.034 | 367.202 | 367.370 | 367.537 | 367.705 | 367.872 | 368.040 | 368.207 | 368.375 | 368.542 |
| 1430 | 368.709 | 368.876 | 369.044 | 369.211 | 369.378 | 369.545 | 369.712 | 369.879 | 370.046 | 370.213 |
| 1440 | 370.380 | 370.547 | 370.714 | 370.881 | 371.048 | 371.215 | 371.381 | 371.548 | 371.715 | 371.881 |
| 1450 | 372.048 | 372.214 | 372.381 | 372.547 | 372.714 | 372.880 | 373.047 | 373.213 | 373.379 | 373.546 |
| 1460 | 373.712 | 373.878 | 374.044 | 374.210 | 374.377 | 374.543 | 374.709 | 374.875 | 375.041 | 375.206 |
| 1470 | 375.372 | 375.538 | 375.704 | 375.870 | 376.036 | 376.201 | 376.367 | 376.533 | 376.698 | 376.864 |
| 1480 | 377.029 | 377.195 | 377.360 | 377.526 | 377.691 | 377.856 | 378.022 | 378.187 | 378.352 | 378.517 |
| 1490 | 378.683 | 378.848 | 379.013 | 379.178 | 379.343 | 379.508 | 379.673 | 379.838 | 380.003 | 380.167 |
| 1500 | 380.332 | 380.497 | 380.662 | 380.826 | 380.991 | 381.156 | 381.320 | 381.485 | 381.649 | 381.814 |
| 1510 | 381.978 | 382.143 | 382.307 | 382.472 | 382.636 | 382.800 | 382.964 | 383.129 | 383.293 | 383.457 |
| 1520 | 383.621 | 383.785 | 383.949 | 384.113 | 384.277 | 384.441 | 384.605 | 384.769 | 384.933 | 385.096 |
| 1530 | 385.260 | 385.424 | 385.588 | 385.751 | 385.915 | 386.078 | 386.242 | 386.405 | 386.569 | 386.732 |
| 1540 | 386.896 | 387.059 | 387.222 | 387.386 | 387.549 | 387.712 | 387.875 | 388.038 | 388.201 | 388.364 |
| 1550 | 388.528 | 388.691 | 388.853 | 389.016 | 389.179 | 389.342 | 389.505 | 389.668 | 389.830 | 389.993 |
| 1560 | 390.156 | 390.319 | 390.481 | | | | | | | |

TEMPERATURE & PROCESS INSTRUMENTS - CON