

### Temperature vs Resistance Characteristic and Tolerance for Temp-Pro RTDs

Platinum-winding, 100Ω @ 0°C (± 0.1%)  
 Temperature coefficient, α = .00385

#### Resistance vs Temperature (°F)

°F	0	-10	-20	-30	-40	-50	-60	-70	-80	-90	-100	Ω/°F †
-400	4.49	3.40	2.30	—	—	—	—	—	—	—	—	—
-300	25.10	22.71	20.33	17.97	15.65	13.38	11.21	9.25	7.42	5.91	4.49	0.206
-200	48.38	46.09	43.80	41.49	39.18	36.87	34.54	32.21	29.87	27.48	25.10	0.233
-100	70.95	68.72	66.49	64.25	62.00	59.75	57.49	55.22	52.95	50.67	48.38	0.226
0	93.01	90.81	88.61	86.41	84.21	82.01	79.81	77.61	75.39	73.18	70.95	0.221

°F	0	10	20	30	40	50	60	70	80	90	100	Ω/°F †
0	93.01	95.20	97.38	99.57	101.74	103.90	106.06	108.22	110.38	112.53	114.68	0.217
100	114.68	116.82	118.97	121.10	123.24	125.37	127.48	129.62	131.74	133.86	135.97	0.213
200	135.97	138.08	140.18	142.29	144.38	146.48	148.57	150.66	152.74	154.82	156.90	0.209
300	156.90	158.97	161.04	163.11	165.17	167.23	169.29	171.34	173.39	175.43	177.48	0.206
400	177.48	179.51	181.55	183.58	185.61	187.63	189.65	191.67	193.68	195.69	197.69	0.202
500	197.69	199.70	201.69	203.69	205.68	207.67	209.65	211.63	213.61	215.58	217.55	0.199
600	217.55	219.52	221.48	223.44	225.40	227.35	229.30	231.24	233.19	235.12	237.06	0.195
700	237.06	238.99	240.92	242.84	244.76	246.68	248.59	250.50	252.40	254.31	256.20	0.191
800	256.20	258.10	259.99	261.88	263.76	265.64	267.52	269.39	271.26	273.13	274.99	0.188
900	274.99	276.85	278.71	280.56	282.41	284.26	286.10	287.93	289.77	291.60	293.43	0.184
1000	293.43	295.25	297.07	298.89	300.70	302.51	304.32	306.12	307.92	309.71	311.50	0.181
1100	311.50	313.29	315.07	316.86	318.63	320.41	322.18	323.94	325.71	327.47	329.22	0.177
1200	329.22	330.97	332.72	334.47	336.21	337.95	339.68	341.41	343.14	344.86	346.58	0.174
1300	346.58	348.30	350.01	351.72	353.43	355.13	356.83	358.52	360.21	361.90	363.59	0.170
1400	363.59	365.27	366.95	368.62	370.29	371.96	373.62	375.28	376.93	378.56	380.23	0.167
1500	380.23	381.81	383.52	385.16	386.79	388.42	390.05	—	—	—	—	0.164

#### Resistance vs Temperature (°C)

°C	0	-10	-20	-30	-40	-50	-60	-70	-80	-90	-100	Ω/°C †
-200	18.44	14.26	10.35	7.06	4.49	2.52	—	—	—	—	—	—
-100	60.20	56.13	52.04	47.93	43.80	39.65	35.28	31.28	27.03	22.71	18.44	0.418
0	<b>100.00</b>	96.07	92.13	88.17	84.21	80.25	76.28	72.29	68.28	64.25	60.20	0.398
°C	0	10	20	30	40	50	60	70	80	90	100	Ω/°C †
0	100.00	103.90	107.79	111.67	115.54	119.40	123.24	127.07	130.89	134.70	138.50	0.385
100	138.50	142.28	146.06	149.82	153.57	157.32	161.04	164.76	168.47	172.16	175.84	0.373
200	175.84	179.51	183.17	186.82	190.46	194.08	197.70	201.30	204.88	208.46	212.03	0.361
300	212.03	215.58	219.13	222.66	226.18	229.69	233.19	236.67	240.15	243.61	247.06	0.350
400	247.06	250.50	253.93	257.34	260.75	264.14	267.52	270.89	274.25	277.60	280.93	0.338
500	280.93	284.26	287.57	290.87	294.16	297.43	300.70	303.95	307.20	310.43	313.65	0.327
600	313.65	316.86	320.05	323.24	326.41	329.57	R	335.86	338.99	342.10	345.21	0.315
700	345.21	348.30	351.38	354.45	357.51	360.55	363.59	366.61	369.62	372.62	375.61	0.304
800	375.61	378.59	381.55	384.50	387.45	390.38	—	—	—	—	—	0.295

† Average value for 100° range

RTDs with other nominal resistance (i.e.: 500Ω @ 0°C), other temperature coefficient (i.e.: α = .00391) and other tolerances (i.e.: ± 0.03% or ±0.5% @ 0°C) are also available.

#### Tolerances (°F)

Temperature in °F	± Tolerance	
	in °F	Ω
-420	10.4	1.0
-400	8.3	0.9
-350	3.3	0.7
-300	1.9	0.5
-200	1.5	0.4
-100	1.1	0.3
0	0.7	0.2
<b>32</b>	<b>0.6</b>	<b>0.1</b>
100	0.7	0.2
200	0.9	0.2
300	1.5	0.3
400	2.0	0.4
500	2.7	0.6
600	3.3	0.7
700	3.9	0.8
800	4.5	0.9
900	5.4	1.0
1000	6.0	1.1
1100	6.5	1.1
1200	7.0	1.2
1300	7.6	1.3
1400	8.4	1.4
1500	9.0	1.5
1560	9.4	1.5

#### Tolerances (°C)

Temperature in °C	± Tolerance	
	in °C	Ω
-250	5.8	1.0
-220	1.8	0.7
-200	1.2	0.5
-100	0.7	0.3
<b>0</b>	<b>0.3</b>	<b>0.1</b>
100	0.5	0.2
200	1.1	0.4
300	1.7	0.6
400	2.3	0.8
500	3.0	1.0
600	3.6	1.1
700	4.2	1.3
800	4.8	1.4
850	5.2	1.5

