1K7A1

1,000 Ohms @ 25°C ±0.2° 0 -70°C

Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)
-80		0	2,825	71	209.6
-79		1	2,702	72	203.5
-78		2	2,585	73	197.5
-77		3	2,473	74	191.8
-76		4	2,367	75	186.2
-75		5	2,266	76	180.9
-74		6	2,170	77	175.7
-73		7	2,079	78	170.7
-72		8	1,992	79	165.8
-71		9	1,909	80	161.2
-70		10	1,830	81	156.6
-69		11	1,755	82	152.3
-68		12	1,683	83	148.0
-67		13	1,615	84	144.0
-66		14	1,549	85	140.0
-65		15	1,487	86	136.2
-64		16	1,428	87	132.5
-63		17	1,371	88	128.9
-62		18	1,317	89	125.4
-61		19	1,265	90	122.0
-60		20	1,216	91	118.8
-59		21	1,169	92	115.6
-58		22	1,124	93	112.6
-57		23	1,081	94	109.6
-56		24	1,039	95	106.7
-55	54,143	25	1,000	96	104.0
-54	50,785	26	962.3	97	101.3
-53	47,657	27	926.2	98	98.7
-52	44,741	28	891.7	99	96.1
-51	42,022	29	858.7	100	93.7
-50	39,486	30	827.0	101	91.3
-49	37,119	31	796.7	102	89.0
-48	34,908	32	767.6	103	86.8
-47	32,843	33	739.8	104	84.6
-46	30,914	34	713.2	105	82.5
-45	29,109	35	687.6	106	80.4
-44	27,421	36	663.1	107	78.4
-43	25,842	37	639.6	108	76.5
-42	24,364	38	617.1	109	74.6
-41	22,979	39	595.4	110	72.8
-40	21,681	40	574.7	111	71.1
-39	20,465	41	554.8	112	69.4
-38	19,324	42	535.6	113	67.7
-37	18,255	43	517.3	114	66.1
-36	17,250	44	499.6	115	64.5
-35	16,308	45	482.7	116	63.0
-34	15,422	46	466.4	117	61.5
-33	14,590	47	450.7	118	60.1
-32	13,809	48	435.7	119	58.7
-31	13,073	49	421.3	120	57.3
-30	12,382	50	407.4	121	56.0
-29	11,731	51	394.0	122	54.7
-28	11,118	52	381.1	123	53.4
-27	10,541	53	368.7	124	52.2
-26	9,998	54	356.8	125	51.0
-25	9,485	55	345.4	126	49.9
-24	9,002	56	334.3	127	48.8
-23	8,547	57	323.7	128	47.7
-22	8,117	58	313.5	129	46.6
-21	7,712	59	303.6	130	45.6
-20	7,329	60	294.1	131	44.6
-19	6,967	61	285.0	132	43.6
-18	6,626	62	276.1	133	42.7
-17	6,303	63	267.6	134	41.7
-16	5,998	64	259.4	135	40.8
-15	5,709	65	251.5	136	39.9
-14	5,436	66	243.9	137	39.1
-13	5,178	67	236.6	138	38.3
-12	4,933	68	229.5	139	37.4
-11	4,702	69	222.6	140	36.6
-10	4,482	70	216.0	141	35.9
-9	4,275			142	35.1
-8	4,078			143	34.4
-7	3,891			144	33.7
-6	3,714			145	33.0
-5	3,546			146	32.3
-4	3,386			147	31.6
-3	3,235			148	31.0
-2	3,091			149	30.4
-1	2,955			150	29.8

2K3A1

2,000 Ohms @ 25°C ±0.2° 0 -70°C

Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)
-80	1,443,351	0	6,530.3	71	338.60
-79	1,321,342	1	6,206.3	72	327.33
-78	1,210,414	2	5,900.3	73	316.49
-77	1,109,594	3	5,611.1	74	306.07
-76	1,017,816	4	5,337.7	75	296.03
-75	934,245	5	5,079.2	76	286.38
-74	858,099	6	4,834.7	77	277.10
-73	788,647	7	4,603.4	78	268.16
-72	725,287	8	4,384.5	79	259.55
-71	667,436	9	4,177.3	80	251.26
-70	614,575	10	3,980.9	81	243.28
-69	566,242	11	3,794.9	82	235.59
-68	522,033	12	3,618.6	83	228.17
-67	481,566	13	3,451.6	84	221.04
-66	444,506	14	3,293.2	85	214.15
-65	410,531	15	3,142.9	86	207.52
-64	379,380	16	3,000.3	87	201.12
-63	350,786	17	2,865.1	88	194.96
-62	324,541	18	2,736.6	89	189.01
-61	300,425	19	2,614.6	90	183.27
-60	278,258	20	2,498.8	91	177.73
-59	257,873	21	2,388.7	92	172.39
-58	239,106	22	2,284.0	93	167.24
-57	221,830	23	2,184.5	94	162.26
-56	205,913	24	2,090.0	95	157.46
-55	191,239	25	2,000.0	96	152.82
-54	177,703	26	1,914.4	97	148.34
-53	165,213	27	1,832.9	98	144.01
-52	153,681	28	1,755.4	99	139.83
-51	143,024	29	1,681.5	100	135.79
-50	133,177	30	1,611.2	101	131.89
-49	124,068	31	1,544.1	102	128.12
-48	115,640	32	1,480.3	103	124.47
-47	107,838	33	1,419.4	104	120.94
-46	100,611	34	1,361.3	105	117.53
-45	93,914	35	1,306.0	106	114.24
-44	87,704	36	1,253.2	107	111.05
-43	81,945	37	1,202.8	108	107.96
-42	76,599	38	1,154.7	109	104.98
-41	71,635	39	1,108.8	110	102.09
-40	67,023	40	1,064.9	111	99.29
-39	62,738	41	1,023.0	112	96.59
-38	58,753	42	983.02	113	93.97
-37	55,044	43	944.78	114	91.43
-36	51,595	44	908.25	115	88.98
-35	48,382	45	873.31	116	86.60
-34	45,388	46	839.90	117	84.29
-33	42,598	47	807.95	118	82.06
-32	39,997	48	777.37	119	79.90
-31	37,571	49	748.12	120	77.80
-30	35,306	50	720.13	121	75.77
-29	33,192	51	693.33	122	73.80
-28	31,217	52	667.66	123	71.89
-27	29,372	53	643.07	124	70.04
-26	27,647	54	619.53	125	68.25
-25	26,034	55	596.96	126	66.51
-24	24,524	56	575.34	127	64.82
-23	23,111	57	554.61	128	63.18
-22	21,789	58	534.73	129	61.59
-21	20,549	59	515.67	130	60.05
-20	19,388	60	497.38	131	58.56
-19	18,299	61	479.84	132	57.10
-18	17,278	62	463.00	133	55.69
-17	16,320	63	446.85	134	54.32
-16	15,421	64	431.34	135	53.00
-15	14,576	65	416.44	136	51.70
-14	13,780	66	402.14	137	50.45
-13	13,038	67	388.40	138	49.23
-12	12,337	68	375.20	139	48.05
-11	11,678	69	362.51	140	46.90
-10	11,058	70	350.32	141	45.79
-9	10,475			142	44.70
-8	9,926.0			143	43.65
-7	9,408.8			144	42.62
-6	8,921.8			145	41.63
-5	8,462.6			146	40.66
-4	8,029.8			147	39.72
-3	7,621.7			148	38.80
-2	7,236.7			149	37.91
-1	6,873.2			150	37.04

2.2K3A1

2,252 Ohms @ 25°C ±0.2° 0 -70°C

Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)
-80	1,643,256	0	7,353.0	71	381.26
-79	1,503,707	1	6,988.1	72	368.57
-78	1,376,943	2	6,643.4	73	356.36
-77	1,261,723	3	6,317.8	74	344.62
-76	1,156,930	4	6,010.0	75	333.32
-75	1,061,539	5	5,719.1	76	322.46
-74	974,660	6	5,443.7	77	311.99
-73	893,222	7	5,183.2	78	301.92
72	823,248	8	4,936.8	79	292.23
-71	757,339	9	4,703.3	80	282.89
-70	697,132	10	4,482.3	81	273.89
-69	642,127	11	4,272.9	82	265.23
-68	591,821	12	4,074.5	83	256.89
-67	545,777	13	3,886.4	84	248.84
-66	503,637	14	3,707.9	85	241.09
-65	465,020	15	3,538.8	86	233.62
-64	429,620	16	3,378.3	87	226.42
-63	397,149	17	3,225.9	88	219.47
-62	367,340	18	3,081.3	89	212.77
-61	339,971	19	2,939.5	90	206.31
-60	314,815	20	2,813.6	91	200.07
-59	291,688	21	2,689.6	92	194.06
-58	270,405	22	2,571.8	93	188.25
-57	250,815	23	2,459.8	94	182.64
-56	232,771	24	2,353.3	95	177.23
-55	216,145	25	2,252.0	96	172.01
-54	200,808	26	2,155.6	97	166.96
-53	186,660	27	2,063.9	98	162.08
-52	173,602	28	1,976.6	99	157.37
-51	161,538	29	1,893.4	100	152.83
-50	150,395	30	1,814.2	101	148.43
-49	140,087	31	1,738.8	102	144.18
-48	130,553	32	1,666.9	103	140.07
-47	121,727	33	1,598.3	104	136.10
-46	113,553	34	1,532.9	105	132.26
-45	105,981	35	1,470.6	106	128.55
-44	98,963	36	1,411.1	107	124.95
-43	92,452	37	1,354.4	108	121.48
-42	86,412	38	1,300.2	109	118.12
-41	80,803	39	1,248.5	110	114.87
-40	75,593	40	1,199.2	111	111.72
-39	70,753	41	1,152.0	112	108.67
-38	66,252	42	1,107.0	113	105.72
-37	62,066	43	1,063.9	114	102.86
-36	58,171	44	1,022.8	115	100.10
-35	54,542	45	983.42	116	97.418
-34	51,164	46	945.81	117	94.822
-33	48,017	47	909.83	118	92.308
-32	45,081	48	875.40	119	89.873
-31	42,343	49	842.47	120	87.511
-30	39,789	50	810.94	121	85.224
-29	37,404	51	780.75	122	83.007
-28	35,176	52	751.85	123	80.857
-27	33,095	53	724.16	124	78.772
-26	31,150	54	697.65	125	76.752
-25	29,331	55	672.24	126	74.792
-24	27,629	56	647.88	127	72.890
-23	26,036	57	624.53	128	71.046
-22	24,545	58	602.15	129	69.256
-21	23,148	59	580.68	130	67.520
-20	21,839	60	560.09	131	65.836
-19	20,611	61	540.34	132	64.200
-18	19,461	62	521.38	133	62.613
-17	18,381	63	503.18	134	61.071
-16	17,368	64	485.70	135	59.575
-15	16,416	65	468.94	136	58.122
-14	15,522	66	452.82	137	56.711
-13	14,683	67	437.35	138	55.340
12	13,893	68	422.48	139	54.008
-11	13,151	69	408.20	140	52.715
-10	12,453	70	394.47	141	51.458
-9	11,796			142	50.237
-8	11,177			143	49.049
-7	10,595			144	47.895
-6	10,046			145	46.774
-5	9,529.2			146	45.684
-4	9,041.7			147	44.623
-3	8,582.0			148	43.592
-2	8,148.1			149	42.589
-1	7,739.2			150	41.614

NOTE: RT- Tables also apply for BetaCURVE, Mini-BetaCURVE and 2 & 3 milliwatt series

(*) not available in mini***BetaCURVE***

INTERCHANGEABLE **BetaCURVE** R – T SPECIFICATION

3K3A1

3,000 Ohms @ 25°C ±0.2° 0 -70°C

Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)
-80	2,189,062	0	9,795.2	71	507.90
-79	2,033,362	1	9,309.1	72	490.98
-78	1,834,293	2	8,850.0	73	474.72
-77	1,680,803	3	8,416.3	74	459.08
-76	1,541,203	4	8,006.3	75	444.04
-75	1,414,129	5	7,618.7	76	429.56
-74	1,298,393	6	7,251.8	77	415.61
-73	1,189,906	7	6,904.8	78	402.20
-72	1,096,689	8	6,576.5	79	389.29
-71	1,008,889	9	6,265.6	80	376.85
-70	928,683	10	5,971.1	81	364.87
-69	855,409	11	5,692.1	82	353.33
-68	788,394	12	5,427.8	83	342.21
-67	727,056	13	5,177.2	84	331.50
-66	670,919	14	4,939.5	85	321.17
-65	619,476	15	4,714.2	86	311.22
-64	572,319	16	4,500.3	87	301.62
-63	529,062	17	4,297.4	88	292.37
-62	489,352	18	4,104.8	89	283.44
-61	452,892	19	3,915.9	90	274.83
-60	419,380	20	3,748.1	91	266.52
-59	388,572	21	3,583.0	92	258.51
-58	360,219	22	3,426.0	93	250.78
-57	334,123	23	3,276.8	94	243.31
-56	310,086	24	3,135.0	95	236.10
-55	287,937	**25**	**3,000.0**	96	229.14
-54	267,507	26	2,871.6	97	222.41
-53	248,660	27	2,749.4	98	215.92
-52	231,264	28	2,633.1	99	209.65
-51	215,193	29	2,522.3	100	203.59
-50	200,348	30	2,416.8	101	197.73
-49	186,647	31	2,316.3	102	192.07
-48	173,916	32	2,220.5	103	186.60
-47	162,159	33	2,129.2	104	181.31
-46	151,269	34	2,042.1	105	176.19
-45	141,383	35	1,959.0	106	171.24
-44	131,833	36	1,879.8	107	166.46
-43	123,160	37	1,804.3	108	161.83
-42	115,114	38	1,732.1	109	157.35
-41	107,642	39	1,663.2	110	153.02
-40	100,701	40	1,597.5	111	148.82
-39	94,254	41	1,534.7	112	144.77
-38	88,258	42	1,474.6	113	140.85
-37	82,682	43	1,417.3	114	137.03
-36	77,492	44	1,362.5	115	133.34
-35	72,658	45	1310.07	116	129.775
-34	68,159	46	1259.96	117	126.317
-33	63,966	47	1212.02	118	122.969
-32	60,055	48	1166.16	119	119.724
-31	56,408	49	1122.30	120	116.578
-30	53,005	50	1080.30	121	113.531
-29	49,827	51	1040.08	122	110.577
-28	46,860	52	1001.58	123	107.713
-27	44,088	53	964.69	124	104.937
-26	41,497	54	929.38	125	102.246
-25	39,073	55	895.52	126	99.634
-24	36,806	56	863.08	127	97.100
-23	34,684	57	831.97	128	94.644
-22	32,697	58	802.16	129	92.260
-21	30,836	59	773.56	130	89.946
-20	29,092	60	746.12	131	87.703
-19	27,458	61	719.82	132	85.524
-18	25,924	62	694.55	133	83.410
-17	24,486	63	670.31	134	81.356
-16	23,136	64	647.02	135	79.363
-15	21,868	65	624.69	136	77.427
-14	20,678	66	603.23	137	75.547
-13	19,559	67	582.62	138	73.721
-12	18,508	68	562.81	139	71.947
-11	17,519	69	543.78	140	70.225
-10	16,589	70	525.49	141	68,550
-9	15,714			142	66,923
-8	14,890			143	65,341
-7	14,114			144	63,804
-6	13,383			145	62,309
-5	12,694.4			146	60,857
-4	12,044.8			147	59,445
-3	11,432.6			148	58,071
-2	10,854.8			149	56,735
-1	10,309.8			150	55,436

5K3A1

5,000 Ohms @ 25°C ±0.2° 0 -70°C

Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)
-80	3,648,437	0	16,325.4	71	846.50
-79	3,338,603	1	15,515.2	72	818.31
-78	3,057,155	2	14,750.0	73	791.21
-77	2,801,338	3	14,027.1	74	765.14
-76	2,568,672	4	13,343.8	75	740.06
-75	2,356,881	5	12,697.8	76	715.93
-74	2,163,988	6	12,086.3	77	692.68
-73	1,983,176	7	11,508.0	78	670.34
-72	1,827,816	8	10,960.8	79	648.82
-71	1,681,481	9	10,442.6	80	628.09
-70	1,547,805	10	9,951.8	81	608.11
-69	1,425,681	11	9,486.8	82	588.88
-68	1,313,991	12	9,046.3	83	570.36
-67	1,211,760	13	8,628.7	84	552.50
-66	1,118,199	14	8,232.5	85	535.29
-65	1,032,459	15	7,857.0	86	518.70
-64	953,864	16	7,500.6	87	502.70
-63	881,770	17	7,162.3	88	487.28
-62	815,586	18	6,841.3	89	472.40
-61	754,820	19	6,536.4	90	458.06
-60	698,967	20	6,246.8	91	444.20
-59	647,619	21	5,971.6	92	430.85
-58	600,366	22	5,710.0	93	417.96
-57	556,872	23	5,461.3	94	405.51
-56	516,809	24	5,225.0	95	393.49
-55	479,895	**25**	**5,000**	96	381.89
-54	445,841	26	4,786.0	97	370.69
-53	414,433	27	4,582.4	98	359.87
-52	385,440	28	4,388.5	99	349.41
-51	358,655	29	4,203.9	100	339.32
-50	333,914	30	4,028.0	101	329.55
-49	311,028	31	3,860.5	102	320.12
-48	289,859	32	3,700.8	103	311.00
-47	270,265	33	3,548.6	104	302.18
-46	252,115	34	3,403.5	105	293.65
-45	235,395	35	3,265.1	106	285.41
-44	219,722	36	3,133.1	107	277.43
-43	205,266	37	3,007.1	108	269.72
-42	191,856	38	2,886.9	109	262.26
-41	179,403	39	2,772.1	110	255.03
-40	167,835	40	2,662.4	111	248.04
-39	157,089	41	2,557.8	112	241.28
-38	147,096	42	2,457.7	113	234.72
-37	137,803	43	2,362.1	114	228.38
-36	129,153	44	2,270.8	115	222.24
-35	121,097	45	2,183.45	116	216.29
-34	113,598	46	2,099.93	117	210.53
-33	106,609	47	2,020.04	118	204.95
-32	100,092	48	1,943.60	119	199.54
-31	94,013	49	1,870.50	120	194.30
-30	88,342	50	1,800.49	121	189.22
-29	83,046	51	1,733.46	122	184.30
-28	78,100	52	1,669.30	123	179.52
-27	73,480	53	1,607.81	124	174.89
-26	69,161	54	1,548.96	125	170.41
-25	65,122	55	1,492.54	126	166.06
-24	61,343	56	1,438.46	127	161.83
-23	57,807	57	1,386.62	128	157.71
-22	54,496	58	1,336.93	129	153.77
-21	51,394	59	1,289.26	130	149.91
-20	48,487	60	1,243.53	131	146.17
-19	45,763	61	1,199.70	132	142.54
-18	43,207	62	1,157.59	133	139.02
-17	40,810	63	1,117.18	134	135.59
-16	38,561	64	1,078.37	135	132.27
-15	36,447	65	1,041.15	136	129.04
-14	34,464	66	1,005.38	137	125.91
-13	32,599	67	971.03	138	122.87
-12	30,846	68	938.02	139	119.91
-11	29,199	69	906.30	140	117.04
-10	27,649	70	875.81	141	114.25
-9	26,190			142	111.54
-8	24,817			143	108.90
-7	23,523			144	106.34
-6	22,305			145	103.85
-5	21,157.3			146	101.43
-4	20,071.7			147	99,074
-3	19,054.3			148	96,785
-2	18,091.4			149	94,559
-1	17,183.1			150	92,393

10K3A1

10,000 ohms @ 25°C ±0.2° 0 -70°C

Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)	Temp. (°C.)	R Value (Ohms)
-80	7,296,874	0	32,650.8	71	1,693.00
-79	6,677,205	1	31,030.4	72	1,636.63
-78	6,114,311	2	29,500.1	73	1,582.41
-77	5,602,677	3	28,054.2	74	1,530.28
-76	5,137,343	4	26,687.6	75	1,480.12
-75	1,713,762	5	25,395.5	76	1,431.87
-74	4,327,977	6	24,172.7	77	1,385.37
-73	3,966,352	7	23,016.0	78	1,340.68
-72	3,655,631	8	21,921.7	79	1,297.64
-71	3,362,963	9	20,885.2	80	1,256.17
-70	3,095,611	10	19,903.5	81	1,216.23
-69	2,851,363	11	18,973.6	82	1,177.75
-68	2,627,981	12	18,092.6	83	1,140.71
-67	2,423,519	13	17,257.4	84	1,104.99
-66	2,236,398	14	16,465.1	85	1,070.58
-65	2,064,919	15	15,714.0	86	1,037.40
-64	1,907,728	16	15,001.2	87	1,005.40
-63	1,763,539	17	14,324.6	88	974.56
-62	1,631,173	18	13,682.6	89	944.81
-61	1,509,639	19	13,052.8	90	916.11
-60	1,397,935	20	12,493.7	91	888.41
-59	1,295,239	21	11,943.3	92	861.70
-58	1,200,732	22	11,426.0	93	835.93
-57	1,113,741	23	10,922.7	94	811 '
-56	1,033,619	24	10,449.9	95	786..
-55	959,789	**25**	**10,000**	96	763.79
-54	891,589	26	9,572.0	97	741.38
-53	828,865	27	9,164.7	98	719.74
-52	770,880	28	8,777.0	99	698.82
-51	717,310	29	8,407.7	100	678.63
-50	667,828	30	8,056.0	101	659.10
-49	622,055	31	7,720.9	102	640.23
-48	579,718	32	7,401.7	103	622.00
-47	540,530	33	7,097.2	104	604.36
-46	504,230	34	6,807.0	105	587.31
-45	470,609	35	6,530.1	106	570.82
-44	439,445	36	6,266.1	107	554.86
-43	410,532	37	6,014.2	108	539.41
-42	383,712	38	5,773.7	109	524.51
-41	358,806	39	5,544.1	110	510.06
-40	335,671	40	5,324.9	111	496.08
-39	314,179	41	5,115.6	112	482.55
-38	294,193	42	4,915.5	113	469.45
-37	275,605	43	4,724.3	114	456.76
-36	258,307	44	4,541.6	115	444.48
-35	242,195	45	4,366.9	116	432.58
-34	227,196	46	4,199.9	117	421.06
-33	213,219	47	4,040.1	118	409.90
-32	200,184	48	3,887.2	119	399.08
-31	188,026	49	3,741.1	120	388.59
-30	176,683	50	3,601.0	121	378.44
-29	166,091	51	3,466.9	122	368.59
-28	156,199	52	3,338.6	123	359.05
27	146,959	53	3,215.6	124	349.79
-26	138,322	54	3,097.9	125	340.82
-25	130,243	55	2,985.1	126	332.11
-24	122,687	56	2,876.9	127	323.67
23	115,613	57	2,773.2	128	315.48
-22	108,991	58	2,673.9	129	307.53
21	102,787	59	2,578.5	130	299.82
-20	96,974	60	2,487.1	131	292.34
19	91,525	61	2,399.4	132	285.08
-18	86,415	62	2,315.2	133	278.03
17	81,621	63	2,234.7	134	271.19
16	77,121	64	2,156.7	135	264.54
-15	72,895	65	2,082.3	136	258.09
14	68,927	66	2,010.8	137	251.82
-13	65,198	67	1,942.1	138	245.74
-12	61,693	68	1,876.0	139	239.82
-11	58,397	69	1,812.6	140	234.08
-10	55,298	70	1,751.6	141	228.50
-9	52,380			142	223.08
-8	49,633			143	217.80
-7	47,047			144	212.68
-6	44,610			145	207.70
-5	42,314.6			146	202.86
-4	40,149.5			147	198.15
-3	38,108.5			148	193.57
-2	36,182.8			149	189.12
-1	34,366.1			150	184.79

NOTE: RT- Tables also apply for BetaCURVE, Mini-BetaCURVE and 2 & 3 milliwatt series

U.S.A. 508-842-0516
Ireland 353-91-753238