



Resistors Tubes

Tubular Resistors are available in a wide assortment of diameters and lengths to meet your application needs. Standard applications include high power loads, snubber circuit RF power amplifiers, impulse voltage generators, high voltage circuits and power supplies, X-ray equipment, and dummy loads. The ceramic composition tubes perform well where high peak power or high energy pulses are required to be handled. These non-inductive resistors are able to dissipate the energy uniformly through the entire resistor body. An Anti-track coating is available for on the OD and ID of the resistor tubes between the contact surfaces.



GENERAL SPECIFICATIONS

Model	Dimensions [Inches]			Resistance Value [Ω]		Peak Power [W]	Peak Energy [Joules]	Peak Voltage [Maximum]
	Diameter	I.D	Length	Low	High			
83-TD01A	0.75	0.25	1	2.5	10,000	4.5	1,800	5,000
83-TD02A	0.75	0.25	2	4.2	20,300	9.4	3,770	10,000
83-TD03A	0.75	0.25	3	6.2	30,500	14.0	5,600	15,000
83-TD04A	0.75	0.25	4	8.2	40,700	18.8	7,540	20,000
83-TD05A	0.75	0.25	5	10.5	50,900	22.0	9,400	30,000
83-TD06A	0.75	0.25	6	12.4	61,100	28.3	11,310	40,000
83-TD07A	0.75	0.25	7	14.5	71,000	32.5	13,100	50,000
83-TD08A	0.75	0.25	8	16.5	81,400	37.7	15,080	60,000
83-TD09A	0.75	0.25	9	18.5	91,600	42.0	16,900	70,000
83-TD10A	0.75	0.25	10	20.5	101,800	47.1	18,850	80,000
83-TD11A	0.75	0.25	11	23.0	111,000	51.5	20,700	90,000
83-TD12A	0.75	0.25	12	24.6	122,200	56.5	22,620	100,000
83-TE01C	1.00	0.50	1	2.0	6,000	7.0	2,800	5,000
83-TE02C	1.00	0.50	2	3.0	13,500	14.0	5,600	10,000
83-TE03C	1.00	0.50	3	4.0	19,800	21.0	8,400	15,000
83-TE04C	1.00	0.50	4	6.0	27,000	28.0	11,300	20,000
83-TE05C	1.00	0.50	5	7.0	33,000	35.0	14,100	30,000
83-TE06C	1.00	0.50	6	9.0	40,000	42.0	16,900	40,000
83-TE07C	1.00	0.50	7	9.5	46,000	49.0	19,700	50,000
83-TE08C	1.00	0.50	8	11.0	54,000	56.0	22,600	60,000
83-TE09C	1.00	0.50	9	12.0	59,000	63.0	25,400	70,000
83-TE10C	1.00	0.50	10	14.0	67,000	70.0	28,200	80,000
83-TE11C	1.00	0.50	11	15.0	72,000	77.0	31,000	90,000
83-TE12C	1.00	0.50	12	17.0	81,000	84.0	33,900	100,000
83-TE13C	1.00	0.50	13	18.0	86,000	91.0	36,700	110,000
83-TE14C	1.00	0.50	14	20.0	95,000	99.0	39,500	120,000
83-TE15C	1.00	0.50	15	20.0	99,000	106.0	42,300	130,000
83-TE16C	1.00	0.50	16	22.0	108,000	113.0	45,200	140,000
83-TE17C	1.00	0.50	17	23.0	112,000	119.0	48,000	150,000
83-TE18C	1.00	0.50	18	25.0	122,000	127.0	50,800	160,000
83-TF01D	1.50	0.75	1	1.0	2,500	18.0	7,000	5,000
83-TF02D	1.50	0.75	2	2.0	5,000	36.0	14,000	10,000
83-TF03D	1.50	0.75	3	2.5	7,500	54.0	21,000	15,000
83-TF04D	1.50	0.75	4	3.0	10,000	75.0	28,000	20,000
83-TF05D	1.50	0.75	5	3.5	12,500	90.0	35,000	30,000
83-TF06D	1.50	0.75	6	4.0	15,000	110.0	42,000	40,000
83-TF07D	1.50	0.75	7	4.5	17,500	130.0	49,000	50,000
83-TF08D	1.50	0.75	8	5.0	20,000	150.0	56,000	60,000
83-TF09D	1.50	0.75	9	5.5	22,500	165.0	63,000	70,000



BULK CERAMIC RESISTORS

Model	Dimensions [Inch]			Resistance Value [Ω]		Peak Power [W]	Peak Energy [Joules]	Peak Voltage [Maximum]
	Diameter	I.D	Length	Low	High			
83-TF10D	1.50	0.75	10.0	6.0	25,000	180.0	70,000	80,000
83-TF11D	1.50	0.75	11.0	6.5	27,500	200.0	77,000	90,000
83-TF12D	1.50	0.75	12.0	7.0	30,000	220.0	85,000	100,000
83-TF13D	1.50	0.75	13.0	7.5	32,500	240.0	92,000	110,000
83-TF14D	1.50	0.75	14.0	8.0	35,000	260.0	100,000	120,000
83-TF15D	1.50	0.75	15.0	8.5	37,500	280.0	107,000	130,000
83-TF16D	1.50	0.75	16.0	9.0	40,000	300.0	114,000	140,000
83-TF17D	1.50	0.75	17.0	9.5	42,500	315.0	121,000	150,000
83-TF18D	1.50	0.75	18.0	10.0	45,000	330.0	128,000	160,000
83-TG01D	1.625	0.75	1.0	0.5	2,100	19.0	7,800	5,000
83-TG02D	1.625	0.75	2.0	1.0	4,200	39.0	15,600	10,000
83-TG03D	1.625	0.75	3.0	1.5	6,300	58.0	23,000	15,000
83-TG04D	1.625	0.75	4.0	2.0	8,500	79.8	31,000	20,000
83-TG05D	1.625	0.75	5.0	2.5	10,600	97.0	39,000	30,000
83-TG06D	1.625	0.75	6.0	3.0	12,000	117.0	47,000	40,000
83-TG07D	1.625	0.75	7.0	3.5	14,500	137.0	54,500	50,000
83-TG08D	1.625	0.75	8.0	4.0	17,000	156.0	62,500	60,000
83-TG09D	1.625	0.75	9.0	4.5	19,000	176.0	70,000	70,000
83-TG10D	1.625	0.75	10.0	5.0	21,000	195.0	78,000	80,000
83-TG11D	1.625	0.75	11.0	5.5	23,000	215.0	86,000	90,000
83-TG12D	1.625	0.75	12.0	6.0	25,000	235.0	94,000	100,000
83-TG13D	1.625	0.75	13.0	6.5	27,000	254.0	101,500	110,000
83-TG14D	1.625	0.75	14.0	7.0	29,000	274.0	109,000	120,000
83-TG15D	1.625	0.75	15.0	7.5	31,500	293.0	117,000	130,000
83-TG16D	1.625	0.75	16.0	8.0	34,000	313.0	125,000	140,000
83-TG17D	1.625	0.75	17.0	8.5	36,000	332.0	133,000	150,000
83-TG18D	1.625	0.75	18.0	9.0	38,000	351.0	141,000	160,000
83-TC01A	0.505	0.25	1.0	5.0	24,000	6.0	700	2,500
83-TC02A	0.505	0.25	2.0	9.9	49,000	12.0	1,400	5,000
83-TC03A	0.505	0.25	3.0	15.0	73,900	18.0	2,100	10,000
83-TC04A	0.505	0.25	4.0	19.7	98,000	24.0	2,800	20,000
83-TC05A	0.505	0.25	5.0	24.8	123,000	30.0	3,500	30,000
83-TC06A	0.505	0.25	6.0	29.6	147,000	36.0	4,200	40,000
83-TC07A	0.505	0.25	7.0	34.8	172,000	42.0	4,900	50,000
83-TC08A	0.505	0.25	8.0	39.4	197,000	48.0	5,600	60,000
83-TC09A	0.505	0.25	9.0	44.8	221,000	54.0	6,300	70,000
83-TC10A	0.505	0.25	10.0	49.3	246,000	60.0	7,000	80,000
83-TC11A	0.505	0.25	11.0	54.5	271,000	66.0	7,700	90,000
83-TC12A	0.505	0.25	12.0	59.2	295,000	72.0	8,400	100,000
83-TD01C	0.75	0.50	1.0	3.5	16,000	6.0	1,000	2,500
83-TD02C	0.75	0.50	2.0	6.5	32,000	12.0	2,000	5,000
83-TD03C	0.75	0.50	3.0	10.0	48,000	18.0	3,000	10,000
83-TD04C	0.75	0.50	4.0	14.0	64,000	24.0	4,000	20,000
83-TD05C	0.75	0.50	5.0	17.0	81,000	30.0	5,000	30,000
83-TD06C	0.75	0.50	6.0	20.0	97,000	36.0	6,000	40,000



BULK CERAMIC RESISTORS

Model	Dimensions [Inch]			Resistance Value [Ω]		Peak Power [W]	Peak Energy [Joules]	Peak Voltage [Maximum]
	Diameter	I.D	Length	Low	High			
83-TD07C	0.75	0.50	7.0	23.0	112,000	42.0	7,000	50,000
83-TD08C	0.75	0.50	8.0	27.0	130,000	48.0	8,000	60,000
83-TD09C	0.75	0.50	9.0	30.0	146,000	54.0	9,000	70,000
83-TD10C	0.75	0.50	10.0	33.0	162,000	60.0	10,000	80,000
83-TD11C	0.75	0.50	11.0	36.0	179,000	66.0	11,000	90,000
83-TD12C	0.75	0.50	12.0	40.0	195,000	72.0	12,000	100,000
83-TE01D	1.00	0.75	1.0	3.0	11,000	7.5	2,000	2,500
83-TE02D	1.00	0.75	2.0	5.0	23,000	15.0	4,000	5,000
83-TE03D	1.00	0.75	3.0	7.0	34,000	22.0	6,000	15,000
83-TE04D	1.00	0.75	4.0	10.0	46,000	30.0	8,500	25,000
83-TE05D	1.00	0.75	5.0	12.0	58,000	40.0	10,000	35,000
83-TE06D	1.00	0.75	6.0	14.0	69,000	50.0	13,000	45,000
83-TE07D	1.00	0.75	7.0	17.0	81,000	62.0	14,000	55,000
83-TE08D	1.00	0.75	8.0	19.0	92,000	75.0	16,500	65,000
83-TE09D	1.00	0.75	9.0	22.0	104,000	80.0	19,000	75,000
83-TE10D	1.00	0.75	10.0	24.0	116,000	85.0	22,000	85,000
83-TE11D	1.00	0.75	11.0	26.0	127,000	92.0	24,000	95,000
83-TE12D	1.00	0.75	12.0	28.0	139,000	100.0	27,000	105,000
83-TE13D	1.00	0.75	13.0	31.0	151,000	107.0	30,000	115,000
83-TE14D	1.00	0.75	14.0	33.0	162,000	115.0	33,000	125,000
83-TE15D	1.00	0.75	15.0	36.0	174,000	122.0	35,000	135,000
83-TE16D	1.00	0.75	16.0	38.0	186,000	130.0	38,000	145,000
83-TE17D	1.00	0.75	17.0	40.0	196,000	140.0	40,000	155,000
83-TE18D	1.00	0.75	18.0	42.0	209,000	150.0	43,000	165,000
83-TF02E	1.50	1.00	2.0	1.7	8,100	24.0	10,000	5,000
83-TF04E	1.50	1.00	4.0	3.3	16,200	48.0	20,000	25,000
83-TF06E	1.50	1.00	6.0	5.0	24,400	70.0	30,000	45,000
83-TF08E	1.50	1.00	8.0	6.6	32,500	100.0	46,000	65,000
83-TF10E	1.50	1.00	10.0	8.2	40,700	120.0	60,000	85,000
83-TF12E	1.50	1.00	12.0	9.8	18,800	150.0	75,000	95,000
83-TF14E	1.50	1.00	14.0	11.5	57,000	175.0	85,000	110,000
83-TF16E	1.50	1.00	16.0	13.1	65,100	200.0	100,000	130,000
83-TF18E	1.50	1.00	18.0	14.7	73,338	225.0	119,000	150,000
83-TG02E	1.625	1.00	2.0	2.0	6,000	30.	12,000	5,000
83-TG04E	1.625	1.00	4.0	3.0	12,000	61.0	24,000	25,000
83-TG06E	1.625	1.00	6.0	4.0	18,000	92.0	37,000	45,000
83-TG08E	1.625	1.00	8.0	6.0	24,000	123.0	49,000	65,000
83-TG10E	1.625	1.00	10.0	7.0	31,000	154.0	61,000	85,000
83-TG12E	1.625	1.00	12.0	8.0	37,000	185.0	74,000	95,000
83-TG14E	1.625	1.00	14.0	9.0	43,000	216.0	86,000	110,000
83-TG16E	1.625	1.00	16.0	11.0	49,000	247.0	98,000	130,000
83-TG18E	1.625	1.00	18.0	12.0	55,000	278.0	111,000	150,000



BULK CERAMIC RESISTORS

Model	Dimensions [Inch]			Resistance Value [Ω]		Peak Power [W]	Peak Energy [Joules]	Peak Voltage [Maximum]
	Diameter	I.D	Length	Low	High			
85-TD02A	0.775	0.26	2.0	10.0	19,000	9.4	3,770	10,000
85-TD04A	0.775	0.26	4.0	20.0	38,000	18.8	7,540	20,000
85-TD06A	0.775	0.26	6.0	30.0	57,000	28.3	11,310	40,000
85-TD08A	0.775	0.26	8.0	40.0	76,000	37.7	15,080	60,000
85-TD10A	0.775	0.26	10.0	50.0	95,000	47.1	18,850	80,000
85-TD12A	0.775	0.26	12.0	60.0	114,000	56.5	22,620	100,000
85-TE02C	1.00	0.51	2.0	7.0	13,500	14.0	5,600	10,000
85-TE04C	1.00	0.51	4.0	14.0	27,000	28.0	11,300	20,000
85-TE06C	1.00	0.51	6.0	21.0	40,000	42.0	16,900	40,000
85-TE08C	1.00	0.51	8.0	28.0	54,000	56.0	22,600	60,000
85-TE10C	1.00	0.51	10.0	35.0	68,000	70.0	28,200	80,000
85-TE12C	1.00	0.51	12.0	42.0	82,000	84.0	33,900	100,000
85-TE14C	1.00	0.51	14.0	49.0	96,000	99.0	39,500	120,000
85-TE16C	1.00	0.51	16.0	56.0	109,000	113.0	45,200	140,000
85-TE18C	1.00	0.51	18.0	62.0	123,000	127.0	50,800	160,000
85-TF02D	1.50	0.78	2.0	3.0	5,000	36.0	14,000	10,000
85-TF04D	1.50	0.78	4.0	5.0	10,000	75.0	28,000	20,000
85-TF06D	1.50	0.78	6.0	8.0	15,000	110.0	42,000	40,000
85-TF08D	1.50	0.78	8.0	11.0	20,000	150.0	56,000	60,000
85-TF10D	1.50	0.78	10.0	13.0	25,000	180.0	70,000	80,000
85-TF12D	1.50	0.78	12.0	16.0	30,000	220.0	85,000	100,000
85-TF14D	1.50	0.78	14.0	19.0	35,000	260.0	100,000	120,000
85-TF16D	1.50	0.78	16.0	21.0	40,000	300.0	114,000	140,000
85-TF18D	1.50	0.78	18.0	24.0	46,000	330.0	128,000	160,000
85-TG02D	1.64	0.78	2.0	2.5	4,000	39.0	15,000	10,000
85-TG04D	1.64	0.78	4.0	5.0	8,000	78.0	31,000	20,000
85-TG06D	1.64	0.78	6.0	7.0	14,000	118.0	47,000	40,000
85-TG08D	1.64	0.78	8.0	10.0	19,000	157.0	62,000	60,000
85-TG10D	1.64	0.78	10.0	12.0	24,000	196.0	78,000	80,000
85-TG12D	1.64	0.78	12.0	15.0	29,000	235.0	94,000	100,000
85-TG14D	1.64	0.78	14.0	17.0	34,000	275.0	109,000	120,000
85-TG16D	1.64	0.78	16.0	20.0	39,000	314.0	125,000	140,000
85-TG18D	1.64	0.78	18.0	22.0	44,000	353.0	141,000	160,000
85-TC02A	0.525	0.26	2.0	26.0	50,000	12.0	1,400	5,000
85-TC04A	0.525	0.26	4.0	51.0	101,000	24.0	2,800	20,000
85-TC06A	0.525	0.26	6.0	78.0	152,000	36.0	4,200	40,000
85-TC08A	0.525	0.26	8.0	102.0	200,000	48.0	5,600	60,000
85-TC10A	0.525	0.26	10.0	128.0	254,000	60.0	7,000	80,000
85-TC12A	0.525	0.26	12.0	154.0	305,000	72.0	8,400	100,000
85-TD02C	0.775	0.51	2.0	15.0	29,000	12.0	2,000	5,000
85-TD04C	0.775	0.51	4.0	30.0	59,000	24.0	4,000	20,000
85-TD06C	0.775	0.51	6.0	45.0	89,000	36.0	6,000	40,000
85-TD08C	0.775	0.51	8.0	60.0	119,000	48.0	8,000	60,000
85-TD10C	0.775	0.51	10.0	75.0	149,000	60.0	10,000	80,000
85-TD12C	0.775	0.51	12.0	90.0	179,000	72.0	12,000	100,000



Model	Dimensions [Inch]			Resistance Value [Ω]		Peak Power [W]	Peak Energy [Joules]	Peak Voltage [Maximum]
	Diameter	I.D	Length	Low	High			
85-TE02D	1.00	0.76	2.0	14.0	25,000	15.0	4,000	5,000
85-TE04D	1.00	0.76	4.0	27.0	51,000	30.0	8,500	25,000
85-TE06D	1.00	0.76	6.0	40.0	77,000	50.0	13,000	45,000
85-TE08D	1.00	0.76	8.0	53.0	103,000	75.0	16,500	65,000
85-TE10D	1.00	0.76	10.0	64.0	129,000	85.0	22,000	85,000
85-TE12D	1.00	0.76	12.0	77.0	155,000	100.0	27,000	105,000
85-TE14D	1.00	0.76	14.0	90.0	181,000	115.0	33,000	125,000
85-TE16D	1.00	0.76	16.0	105.0	207,000	130.0	38,000	145,000
85-TE18D	1.00	0.76	18.0	118.0	233,000	150.0	43,000	165,000
85-TF02E	1.50	1.10	2.0	5.0	8,000	24.0	10,000	5,000
85-TF04E	1.50	1.10	4.0	8.5	16,000	48.0	20,000	25,000
85-TF06E	1.50	1.10	6.0	12.0	24,000	70.0	30,000	45,000
85-TF08E	1.50	1.10	8.0	17.0	32,000	100.0	46,000	65,000
85-TF10E	1.50	1.10	10.0	21.0	40,000	120.0	60,000	85,000
85-TF12E	1.50	1.10	12.0	25.0	48,000	150.0	75,000	95,000
85-TF14E	1.50	1.10	14.0	29.0	56,000	175.0	85,000	110,000
85-TF16E	1.50	1.10	16.0	33.0	64,000	200.0	100,000	130,000
85-TF18E	1.50	1.10	18.0	37.0	73,000	225.0	119,000	150,000
85-TG02E	1.64	1.10	2.0	4.0	6,000	30.0	12,000	5,000
85-TG04E	1.64	1.10	4.0	6.5	12,000	61.0	24,000	25,000
85-TG06E	1.64	1.10	6.0	9.5	18,000	92.0	37,000	45,000
85-TG08E	1.64	1.10	8.0	13.0	24,000	123.0	49,000	65,000
85-TG10E	1.64	1.10	10.0	16.0	30,000	154.0	61,000	85,000
85-TG12E	1.64	1.10	12.0	19.0	36,000	185.0	74,000	95,000
85-TG14E	1.64	1.10	14.0	22.0	42,000	216.0	86,000	110,000
85-TG16E	1.64	1.10	16.0	25.0	48,000	247.0	98,000	130,000
85-TG18E	1.64	1.10	18.0	28.0	54,000	278.0	111,000	150,000

* **Note** : The material code is defined by the first two numbers - 83 = Zirconium Based Ceramic / 85 = Alumina Based Ceramic. Part Number plus the Resistance Code is used for specifying a particular part. The Resistance code is defined by the first two numbers of the resistance value, followed by a single number multiplier, and the resistance tolerance (20% is L, 10% is K, 5% is J). When the resistance is less than 10 ohms, the multiplier is not used and replaced by an "R". For example a 1.0" x 0.50" X 6.0" Resistor Tube at 150 ohms +/-10% would be qualified as 83-TE06C-151K, and a 1.0" x 0.75" X 16.0 Resistor Tube at 5,000 ohms +/-20% would be 83-TE16D-502L.