# ESL, +105°C



### **Overview**

The KEMET ESL radial aluminum electrolytic capacitors are designed for high reliability and long life (up to 10,000 hours) applications.

## **Applications**

Typical applications include LED drive source.

### **Benefits**

- · Long life, up to 10,000 hours
- Operating temperature of up to +105°C
- · Safety vent on the capacitor base



## **Part Number System**

ESL	106	M	016		Α	C3	AA
Series	Capacitance Code (pF)	Tolerance	Rated Voltage (VDC)		Electrical Parameters	Size Code	Packaging
Radial Aluminum Electrolytic	First two digits represent significant figures for capacitance values. Last digit specifies the number of zeros to be added.	M = ±20%	016 = 16 025 = 25 035 = 35 050 = 50 063 = 63 100 = 100	160 = 160 200 = 200 250 = 250 350 = 350 400 = 400 450 = 450	A = Standard	See Dimension Table	See Ordering Options Table



**Table 1 - Ratings & Part Number Reference** 

		D . I		D.F.	<b>D</b> 0	FOR	1.0	
	VDC	Rated		DF	RC	ESR	LC	
VDC	Surge	Capacitance	Case Size	120 Hz	100 kHz	100 kHz	20°C	Part Number
VDC		120 Hz 20°C	D x L (mm)	20°C	105°C	20°C	2 Minutes	i dit itallibei
	Voltage	(µF)		(tan δ %)*	(mA)	(Ω)	(μ <b>A</b> )	
16	20	10	5x11	16	150	0.950	3.0	ESL106M016AC3(1)
16	20	15	5x11	16	155	0.950	3.0	ESL156M016AC3(1)
16	20	22	5x11	16	170	0.360	3.5	ESL226M016AC3(1)
16	20	33	5x11	16	185	0.360	5.3	ESL336M016AC3(1)
16 16	20 20	39 47	5x11 5x11	16 16	225 245	0.360 0.230	6.2 7.5	ESL396M016AC3(1) ESL476M016AC3(1)
16	20	56	5x11	16	280	0.230	9.0	ESL566M016AC3(1)
16	20	68	5x11	16	305	0.230	10.9	ESL686M016AC3(1)
16	20	100	5x11	16	345	0.230	16.0	ESL107M016AC3(1)
16	20	120	6.3x11	16	485	0.098	19.2	ESL127M016AE3(1)
16	20	150	6.3x11	16	510	0.098	24.0	ESL157M016AE3(1)
16 16	20 20	180 220	6.3x11 6.3x11	16 16	525 555	0.098 0.098	28.8 35.2	ESL187M016AE3(1) ESL227M016AE3(1)
16	20	270	8x11.5	16	870	0.061	43.2	ESL277M016AGM(1)
16	20	330	8x11.5	16	920	0.061	52.8	ESL337M016AGM(1)
16	20	390	8x11.5	16	940	0.061	62.4	ESL397M016AGM(1)
16	20	470	8x11.5	16	960	0.061	75.2	ESL477M016AGM(1)
16	20	560	10x12.5	16	1340	0.043	89.6	ESL567M016AH9(1)
16	20	560	8x16	16	1230	0.049	89.6	ESL567M016AG8(1)
16 16	20 20	680 680	10x12.5 8x16	16 16	1340 1280	0.043 0.049	108.8 108.8	ESL687M016AH9(1) ESL687M016AG8(1)
16	20	820	10x16	16	1770	0.031	131.2	ESL827M016AH8(1)
16	20	820	8x20	16	1540	0.031	131.2	ESL827M016AG6(1)
16	20	1000	10x16	16	1770	0.031	160.0	ESL108M016AH8(1)
16	20	1000	8x20	16	1540	0.031	160.0	ESL108M016AG6(1)
16	20	1200	10x20	16	1970	0.022	192.0	ESL128M016AH4(1)
16	20 20	1200	12.5x15	16	2340	0.020	192.0	ESL128M016AK7(1)
16 16	20	1500 1500	10x20 12.5x15	16 16	1970 2340	0.022 0.020	240.0 240.0	ESL158M016AH4(1) ESL158M016AK7(1)
16	20	1800	10x25	16	2260	0.020	288.0	ESL188M016AH5(1)
16	20	1800	12.5x20	16	2490	0.019	288.0	ESL188M016AK5(1)
16	20	2200	12.5x20	18	2490	0.019	352.0	ESL228M016AK5(1)
16	20	2700	12.5x25	18	2710	0.017	432.0	ESL278M016AK1(1)
16	20	3300	12.5x30	20	2960	0.014	528.0	ESL338M016AK2(1)
16 16	20 20	3300 3900	16x20 12.5x30	20 20	2960 3060	0.017 0.014	528.0 624.0	ESL338M016AM5AA ESL398M016AK2(1)
16	20	3900	16x20	20	3060	0.017	624.0	ESL398M016AM5AA
16	20	4700	12.5x35	22	3280	0.013	752.0	ESL478M016AK3(1)
16	20	4700	16x25	22	3240	0.014	752.0	ESL478M016AM7AA
16	20	5600	16x30	24	3700	0.012	896.0	ESL568M016AM9AA
16	20	5600	18x25	24	3660	0.013	896.0	ESL568M016AN5AA
16 16	20 20	6800 6800	16x30 18x25	26 26	3900 3860	0.012 0.013	1088.0 1088.0	ESL688M016AM9AA ESL688M016AN5AA
25	32	10	5x11	14	160	0.950	3.0	ESL106M025AC3(1)
25	32	15	5x11	14	170	0.950	3.8	ESL156M025AC3(1)
25	32	22	5x11	14	185	0.360	5.5	ESL226M025AC3(1)
25	32	33	5x11	14	200	0.360	8.3	ESL336M025AC3(1)
25	32	39	5x11	14	225	0.360	9.8	ESL396M025AC3(1)
25 25	32 32	47 56	5x11	14 14	315 335	0.230	11.8	ESL476M025AC3(1)
25	32	68	5x11 5x11	14	355	0.230 0.230	14.0 17.0	ESL566M025AC3(1) ESL686M025AC3(1)
25	32	100	6.3x11	14	485	0.098	25.0	ESL107M025AE3(1)
25	32	120	6.3x11	14	525	0.098	30.0	ESL127M025AE3(1)
25	32	150	6.3x11	14	555	0.098	37.5	ESL157M025AE3(1)
25	32	180	8x11.5	14	875	0.061	45.0	ESL187M025AGM(1)
25 25	32 32	220 270	8x11.5 8x11.5	14 14	905 965	0.061 0.061	55.0 67.5	ESL227M025AGM(1) ESL277M025AGM(1)
VDC	VDC Surge	Rated Capacitance	Case Size	DF	RC	ESR	LC	Part Number

 $<sup>(1) \</sup> Insert \ packaging \ code. \ See \ Ordering \ Options \ Table \ for \ available \ options.$ 

<sup>\*</sup> When capacitance exceeds 1,000  $\mu$ F, the DF value (%) is increased by 2% for every additional 1,000  $\mu$ F.



Table 1 - Ratings & Part Number Reference cont.

		Rated		DF	RC	ESR	LC	
	VDC	Capacitance	Case Size	120 Hz	100 kHz	100 kHz	20°C	
VDC	Surge	120 Hz 20°C	D x L (mm)	20°C	105°C	20°C	2 Minutes	Part Number
	Voltage		D X L (IIIII)	(tan δ %)*				
		(μF)			(mA)	(Ω)	(µA)	
25 25	32 32	330 390	8x11.5 10x12.5	14 14	965 1340	0.061 0.043	82.5 97.5	ESL337M025AGM(1) ESL397M025AH9(1)
25	32	390	8x16	14	1280	0.043	97.5	ESL397M025AG8(1)
25	32	470	10x12.5	14	1325	0.043	117.5	ESL477M025AH9(1)
25	32	560	10x16	14	1770	0.031	140.0	ESL567M025AH8(1)
25	32	560	8x20	14	1540	0.031	140.0	ESL567M025AG6(1)
25	32	680	10x16	14	1770	0.031	170.0	ESL687M025AH8(1)
25	32	820	10x20	14	2010	0.020	205.0	ESL827M025AH4(1)
25 25	32 32	820 1000	12.5x15 10x25	14 14	2010 2260	0.020 0.020	205.0 250.0	ESL827M025AK7(1) ESL108M025AH5(1)
25	32	1000	12.5x20	14	2260	0.020	250.0	ESL108M025AK5(1)
25	32	1200	12.5x20	14	2370	0.019	300.0	ESL128M025AK5(1)
25	32	1500	12.5x20	14	2490	0.019	375.0	ESL158M025AK5(1)
25	32	1800	12.5x25	14	2910	0.017	450.0	ESL188M025AK1(1)
25	32	2200	12.5x30	16	3460	0.014	550.0	ESL228M025AK2(1)
25	32	2200	16x20	16	3260	0.017	550.0	ESL228M025AM5AA
25	32	2700	12.5x35	16	3580	0.013	675.0	ESL278M025AK3(1)
25 25	32 32	2700	16x25	16	3640 3900	0.014	675.0	ESL278M025AM7AA
25	32	3300 3300	12.5x40 16x25	18 18	3640	0.012 0.014	825.0 825.0	ESL338M025AK4(1) ESL338M025AM7AA
25	32	3900	16x30	18	3900	0.012	975.0	ESL398M025AM9AA
25	32	3900	18x25	18	3660	0.013	975.0	ESL398M025AN5AA
25	32	4700	16x35	20	3840	0.011	1175.0	ESL478M025AMPAA
25	32	4700	18x30	20	4020	0.011	1175.0	ESL478M025AN8AA
25	32	5600	18x35	22	4090	0.010	1400.0	ESL568M025ANAAA
25	32	6800	18x40	24	4160	0.010	1700.0	ESL688M025AN3AA
35	44	10	5x11	12	165	1.350	3.5	ESL106M035AC3(1)
35 35	44 44	15 22	5x11 5x11	12 12	175 195	0.950 0.950	5.3 7.7	ESL156M035AC3(1)
35	44	33	5x11	12	205	0.360	11.6	ESL226M035AC3(1) ESL336M035AC3(1)
35	44	39	5x11	12	245	0.360	13.7	ESL396M035AC3(1)
35	44	47	5x11	12	345	0.230	16.5	ESL476M035AC3(1)
35	44	56	6.3x11	12	480	0.150	19.6	ESL566M035AE3(1)
35	44	68	6.3x11	12	520	0.130	23.8	ESL686M035AE3(1)
35	44	100	6.3x11	12	545	0.085	35.0	ESL107M035AE3(1)
35	44	120	8x11.5	12	780	0.078	42.0	ESL127M035AGM(1)
35 35	44 44	150 180	8x11.5	12 12	840 965	0.072	52.5	ESL157M035AGM(1)
35	44	220	8x11.5 10x12.5	12	1180	0.068 0.043	63.0 77.0	ESL187M035AGM(1) ESL227M035AH9(1)
35	44	220	8x16	12	1020	0.048	77.0	ESL227M035AG8(1)
35	44	270	10x12.5	12	1210	0.043	94.5	ESL277M035AH9(1)
35	44	270	8x16	12	1050	0.048	94.5	ESL277M035AG8(1)
35	44	330	10x12.5	12	1340	0.043	115.5	ESL337M035AH9(1)
35	44	390	10x16	12	1650	0.030	136.5	ESL397M035AH8(1)
35	44	390	8x20	12	1520	0.030	136.5	ESL397M035AG6(1)
35	44	470 560	10x16	12 12	1755	0.030	164.5	ESL477M035AH8(1)
35 35	44 44	560 560	10x20 12.5x15	12	1970 2340	0.030 0.025	196.0 196.0	ESL567M035AH4(1) ESL567M035AK7(1)
35	44	680	10x25	12	2260	0.023	238.0	ESL687M035AH5(1)
35	44	680	12.5x20	12	2360	0.024	238.0	ESL687M035AK5(1)
35	44	820	12.5x20	12	2490	0.024	287.0	ESL827M035AK5(1)
35	44	1000	12.5x20	12	2490	0.024	350.0	ESL108M035AK5(1)
35	44	1200	12.5x25	12	2910	0.023	420.0	ESL128M035AK1(1)
35	44	1500	12.5x30	12	3460	0.014	525.0	ESL158M035AK2(1)
35 35	44 44	1500 1800	16x20 12.5x35	12 12	3260 3470	0.022 0.012	525.0 630.0	ESL158M035AM5AA ESL188M035AK3(1)
VDC	VDC Surge	Rated Capacitance	Case Size	DF	RC	ESR	LC	Part Number

<sup>(1)</sup> Insert packaging code. See Ordering Options Table for available options.

<sup>\*</sup> When capacitance exceeds 1,000  $\mu$ F, the DF value (%) is increased by 2% for every additional 1,000  $\mu$ F.



Table 1 - Ratings & Part Number Reference cont.

	VDC	Rated		DF	RC	ESR	LC	
VDC	_	Capacitance	Case Size	120 Hz	100 kHz	100 kHz	20°C	Part Number
VDC	Surge	120 Hz 20°C	D x L (mm)	20°C	105°C	20°C	2 Minutes	Part Number
	Voltage	(μF)	` ′	(tan δ %)*	(mA)	(Ω)	(μ <b>A</b> )	
35	44	1800	16x25	12	3580	0.021	630.0	ESL188M035AM7AA
35	44	2200	16x25	14	3640	0.020	770.0	ESL228M035AM7AA
35	44	2700	16x30	14	3540	0.011	945.0	ESL278M035AM9AA
35	44	2700	18x25	14	3650	0.011	945.0	ESL278M035AN5AA
35	44	3300	18x35	16	4090	0.010	1155.0	ESL338M035ANAAA
35	44	3900	18x40	16	4160	0.010	1365.0	ESL398M035AN3AA
50 50	63 63	10 15	5x11 5x11	10 10	185 195	1.350 1.350	5.0 7.5	ESL106M050AC3(1) ESL156M050AC3(1)
50	63	22	5x11	10	240	0.550	11.0	ESL226M050AC3(1)
50	63	33	6.3x11	10	400	0.320	16.5	ESL336M050AE3(1)
50	63	39	6.3x11	10	400	0.230	19.5	ESL396M050AE3(1)
50	63	47	6.3x11	10	420	0.230	23.5	ESL476M050AE3(1)
50	63	56	6.3x11	10	385	0.120	28.0	ESL566M050AE3(1)
50	63	68	8x11.5	10	640	0.135	34.0	ESL686M050AGM(1)
50	63	100	8x11.5	10	725	0.120	50.0	ESL107M050AGM(1)
50 50	63 63	120 150	8x16 8x16	10 10	975 975	0.061 0.061	60.0 75.0	ESL127M050AG8(1) ESL157M050AG8(1)
50	63	180	10x16	10	1380	0.046	90.0	ESL187M050AH8(1)
50	63	220	10x16	10	1380	0.042	110.0	ESL227M050AH8(1)
50	63	220	8x20	10	1320	0.041	110.0	ESL227M050AG6(1)
50	63	270	10x20	10	1590	0.036	135.0	ESL277M050AH4(1)
50	63	270	12.5x15	10	1762	0.038	135.0	ESL277M050AK7(1)
50	63	330	10x25	10	1650	0.036	165.0	ESL337M050AH5(1)
50	63	390	10x25	10	1880	0.031	195.0	ESL397M050AH5(1)
50 50	63 63	390 470	12.5x20 12.5x20	10 10	2060 2050	0.030 0.030	195.0 235.0	ESL397M050AK5(1)
50	63	560	12.5x25	10	2420	0.030	280.0	ESL477M050AK5(1) ESL567M050AK1(1)
50	63	680	12.5x30	10	2860	0.021	340.0	ESL687M050AK1(1)
50	63	820	12.5x30	10	2870	0.022	410.0	ESL827M050AK2(1)
50	63	1000	12.5x35	10	3050	0.018	500.0	ESL108M050AK3(1)
50	63	1000	16x25	10	3010	0.020	500.0	ESL108M050AM7AA
50	63	1200	16x30	10	3290	0.018	600.0	ESL128M050AM9AA
50	63	1200	18x25	10	3070	0.025	600.0	ESL128M050AN5AA
50 50	63 63	1500 1500	16x35 18x25	10 10	3050 3310	0.018 0.023	750.0 750.0	ESL158M050AMPAA ESL158M050AN5AA
50	63	1800	16x40	10	3440	0.023	900.0	ESL188M050AM4AA
50	63	1800	18x35	10	3520	0.021	900.0	ESL188M050ANAAA
50	63	2200	18x35	12	3580	0.021	1100.0	ESL228M050ANAAA
63	79	0.47	5x11	9	80	1.350	3.0	ESL474M063AC3(1)
63	79	1	5x11	9	95	1.350	3.0	ESL105M063AC3(1)
63	79 70	1.8	5x11	9	95 105	1.350	3.0	ESL185M063AC3(1)
63 63	79 79	2.2 2.7	5x11	9	105 105	1.350	3.0 3.0	ESL225M063AC3(1)
63	79 79	3.3	5x11 5x11	9	115	1.350 1.350	3.0	ESL275M063AC3(1) ESL335M063AC3(1)
63	79 79	3.9	5x11	9	115	1.350	3.0	ESL395M063AC3(1)
63	79	4.7	5x11	9	120	1.350	3.0	ESL475M063AC3(1)
63	79	5.6	5x11	9	135	1.350	3.5	ESL565M063AC3(1)
63	79	6.8	5x11	9	135	1.350	4.3	ESL685M063AC3(1)
63	79	8.2	5x11	9	145	1.350	5.2	ESL825M063AC3(1)
63	79 70	10	5x11	9	145	1.350	6.3	ESL106M063AC3(1)
63 63	79 79	12 15	5x11 5x11	9 9	155 165	1.350 1.350	7.6 9.5	ESL126M063AC3(1) ESL156M063AC3(1)
63	79	18	6.3x11	9	265	0.380	11.3	ESL186M063AE3(1)
63	79 79	22	6.3x11	9	295	0.380	13.9	ESL226M063AE3(1)
63	79	27	6.3x11	9	305	0.380	17.0	ESL276M063AE3(1)
63	79	33	6.3x11	9	335	0.380	20.8	ESL336M063AE3(1)
VDC	VDC Surge	Rated Capacitance	Case Size	DF	RC	ESR	LC	Part Number

<sup>(1)</sup> Insert packaging code. See Ordering Options Table for available options.

<sup>\*</sup> When capacitance exceeds 1,000  $\mu$ F, the DF value (%) is increased by 2% for every additional 1,000  $\mu$ F.



Table 1 - Ratings & Part Number Reference cont.

		Rated		DF	RC	ESR	LC	
	VDC	Capacitance	Case Size	120 Hz	100 kHz	100 kHz	20°C	
VDC	Surge	120 Hz 20°C	D x L (mm)	20°C	105°C	20°C	2 Minutes	Part Number
	Voltage		D X L (IIIII)	(tan δ %)*				
		(μF)		,	(mA)	(Ω)	(µA)	
63 63	79 79	39 47	8x11.5 8x11.5	9	420 435	0.230 0.230	24.6 29.6	ESL396M063AGM(1) ESL476M063AGM(1)
63	79 79	56	8x11.5	9	445	0.230	35.3	ESL566M063AGM(1)
63	79 79	68	8x11.5	9	460	0.230	42.8	ESL686M063AGM(1)
63	79	82	8x16	9	560	0.170	51.7	ESL826M063AG8(1)
63	79	100	10x12.5	9	570	0.170	63.0	ESL107M063AH9(1)
63	79	100	8x16	9	580	0.170	63.0	ESL107M063AG8(1)
63	79	120	10x12.5	9	580	0.170	75.6	ESL127M063AH9(1)
63	79	150	10x16	9	705	0.190	94.5	ESL157M063AH8(1)
63	79 79	150	8x20	9 9	680	0.120	94.5	ESL157M063AG6(1)
63 63	79 79	180 220	10x16 10x20	9	725 1050	0.190 0.086	113.4 138.6	ESL187M063AH8(1) ESL227M063AH4(1)
63	79	220	12.5x15	9	1020	0.080	138.6	ESL227M063AK7(1)
63	79	270	10x20	9	1080	0.086	170.1	ESL277M063AH4(1)
63	79	270	12.5x15	9	1045	0.080	170.1	ESL277M063AK7(1)
63	79	330	10x25	9	1250	0.076	207.9	ESL337M063AH5(1)
63	79	330	12.5x20	9	1320	0.066	207.9	ESL337M063AK5(1)
63	79	390	12.5x20	9	1350	0.066	245.7	ESL397M063AK5(1)
63	79	470	12.5x25	9	1860	0.047	296.1	ESL477M063AK1(1)
63	79 70	560	12.5x30	9	2050	0.039	352.8	ESL567M063AK2(1)
63 63	79 79	560 680	16x20 12.5x35	9	1980 2250	0.047 0.036	352.8 428.4	ESL567M063AM5AA ESL687M063AK3(1)
63	79 79	680	16x25	9	2315	0.035	428.4	ESL687M063AM7AA
63	79	820	12.5x40	9	2430	0.030	516.6	ESL827M063AK4(1)
63	79	820	16x25	9	2480	0.035	516.6	ESL827M063AM7AA
63	79	1000	16x30	9	2620	0.026	630.0	ESL108M063AM9AA
63	79	1200	16x30	9	2650	0.026	756.0	ESL128M063AM9AA
63	79	1200	18x25	9	2610	0.034	756.0	ESL128M063AN5AA
63	79	1500	16x35	9	2730	0.023	945.0	ESL158M063AMPAA
63	79	1500	18x30	9	2780	0.028	945.0	ESL158M063AN8AA
63 63	79 79	1800 2200	16x40 18x40	9 11	3250 3430	0.021 0.028	1134.0 1386.0	ESL188M063AM4AA
100	125	0.47	5x11	9	95	1.850	3.0	ESL228M063AN3AA ESL474M100AC3(1)
100	125	1	5x11	9	105	1.850	3.0	ESL105M100AC3(1)
100	125	1.8	5x11	9	105	1.800	3.0	ESL185M100AC3(1)
100	125	2.2	5x11	9	115	1.800	3.0	ESL225M100AC3(1)
100	125	2.7	5x11	9	115	1.800	3.0	ESL275M100AC3(1)
100	125	3.3	5x11	9	125	1.800	3.3	ESL335M100AC3(1)
100	125	3.9	5x11	9	135	1.800	3.9	ESL395M100AC3(1)
100	125	4.7	5x11	9 9	145	1.800	4.7	ESL475M100AC3(1)
100 100	125 125	5.6 6.8	6.3x11 6.3x11	9	205 235	1.250 1.250	5.6 6.8	ESL565M100AE3(1) ESL685M100AE3(1)
100	125	8.2	6.3x11	9	255	1.050	8.2	ESL825M100AE3(1)
100	125	10	6.3x11	9	280	0.680	10.0	ESL106M100AE3(1)
100	125	12	8x11.5	9	320	0.390	12.0	ESL126M100AGM(1)
100	125	15	8x11.5	9	320	0.650	15.0	ESL156M100AGM(1)
100	125	18	8x11.5	9	345	0.600	18.0	ESL186M100AGM(1)
100	125	22	8x11.5	9	365	0.520	22.0	ESL226M100AGM(1)
100	125	27	10x12.5	9	460	0.560	27.0	ESL276M100AH9(1)
100	125	27	8x16	9	455	0.550	27.0	ESL276M100AG8(1)
100 100	125 125	33 33	10x12.5 8x16	9	475 465	0.480	33.0	ESL336M100AH9(1)
100	125	33	10x12.5	9	465 485	0.460 0.380	33.0 39.0	ESL336M100AG8(1) ESL396M100AH9(1)
100	125	47	10x12.5	9	510	0.320	47.0	ESL476M100AH9(1)
100	125	56	10x12.5	9	540	0.280	56.0	ESL566M100AH9(1)
100	125	68	8x20	9	675	0.280	68.0	ESL686M100AG6(1)
VDC	VDC Surge	Rated Capacitance	Case Size	DF	RC	ESR	LC	Part Number

<sup>(1)</sup> Insert packaging code. See Ordering Options Table for available options.

<sup>\*</sup> When capacitance exceeds 1,000  $\mu$ F, the DF value (%) is increased by 2% for every additional 1,000  $\mu$ F.



Table 1 - Ratings & Part Number Reference cont.

	1/20	Rated		DF	RC	ESR	LC	
	VDC	Capacitance	Case Size	120 Hz	100 kHz	100 kHz	20°C	
VDC	Surge	120 Hz 20°C	D x L (mm)	20°C	105°C	20°C	2 Minutes	Part Number
	Voltage		D X L (IIIII)	(tan δ %)*				
		(μF)			(mA)	(Ω)	(µA)	
100 100	125 125	82 100	10x16 10x20	9 9	785 865	0.190 0.130	82.0 100.0	ESL826M100AH8(1) ESL107M100AH4(1)
100	125	100	12.5x15	9	845	0.130	100.0	ESL107M100AH4(1)
100	125	120	10x25	9	1050	0.120	120.0	ESL127M100AH5(1)
100	125	150	12.5x20	9	1440	0.085	150.0	ESL157M100AK5(1)
100	125	180	12.5x25	9	1460	0.066	180.0	ESL187M100AK1(1)
100	125	220	12.5x25	9	1630	0.066	220.0	ESL227M100AK1(1)
100	125	270	12.5x30	9	1620	0.056	270.0	ESL277M100AK2(1)
100	125	270	16x20	9	1650	0.064	270.0	ESL277M100AM5AA
100 100	125 125	330 330	12.5x35 16x25	9	1950 1920	0.047 0.048	330.0 330.0	ESL337M100AK3(1)
100	125	390	12.5x40	9	2050	0.040	390.0	ESL337M100AM7AA ESL397M100AK4(1)
100	125	470	16x30	9	2010	0.036	470.0	ESL477M100AM9AA
100	125	560	16x35	9	2430	0.032	560.0	ESL567M100AMPAA
100	125	560	18x30	9	2480	0.034	560.0	ESL567M100AN8AA
100	125	680	16x40	9	2680	0.030	680.0	ESL687M100AM4AA
100	125	680	18x35	9	2870	0.030	680.0	ESL687M100ANAAA
100	125	820	18x40	9	3250	0.028	820.0	ESL827M100AN3AA
160	200	1.8	6.3x11	15	65	13.940	15.8	ESL185M160AE3(1)
160 160	200 200	2.2 2.7	6.3x11 6.3x11	15 15	70 75	13.940 13.940	17.0 18.6	ESL225M160AE3(1) ESL275M160AE3(1)
160	200	3.3	6.3x11	15	80	13.940	20.6	ESL335M160AE3(1)
160	200	3.9	6.3x11	15	85	13.940	22.5	ESL395M160AE3(1)
160	200	4.7	8x11.5	15	85	11.300	25.0	ESL475M160AGM(1)
160	200	5.6	8x11.5	15	100	11.300	27.9	ESL565M160AGM(1)
160	200	6.8	8x11.5	15	105	11.300	31.8	ESL685M160AGM(1)
160	200	8.2	8x11.5	15	115	11.300	36.2	ESL825M160AGM(1)
160	200	10	8x16	15	135	7.500	42.0	ESL106M160AG8(1)
160 160	200 200	12 15	8x16	15 15	140 290	7.500	48.4	ESL126M160AG8(1)
160	200	15	10x12.5 8x16	15	285	4.270 4.270	58.0 58.0	ESL156M160AH9(1) ESL156M160AG8(1)
160	200	18	8x16	15	310	4.270	67.6	ESL186M160AG8(1)
160	200	22	10x16	15	390	2.250	80.4	ESL226M160AH8(1)
160	200	22	8x20	15	390	2.250	80.4	ESL226M160AG6(1)
160	200	27	10x16	15	410	2.250	96.4	ESL276M160AH8(1)
160	200	33	10x20	15	530	1.870	115.6	ESL336M160AH4(1)
160	200	33	12.5x15	15	570	1.870	115.6	ESL336M160AK7(1)
160	200	39	10x25	15	590	1.870	134.8	ESL396M160AH5(1)
160 160	200 200	39 47	12.5x15 10x25	15 15	590 610	1.870 1.870	134.8 160.4	ESL396M160AK7(1) ESL476M160AH5(1)
160	200	47	12.5x20	15	630	1.870	160.4	ESL476M160AK5(1)
160	200	56	12.5x20	15	740	1.550	189.2	ESL566M160AK5(1)
160	200	56	8x50	15	740	1.550	189.2	ESL566M160AGG(1)
160	200	68	12.5x20	15	800	1.100	227.6	ESL686M160AK5(1)
160	200	82	12.5x25	15	830	1.100	272.4	ESL826M160AK1(1)
160	200	100	10x50	15	1210	1.100	330.0	ESL107M160AHE(1)
160 160	200 200	100 120	16x20 16x25	15 15	1120 1240	1.100	330.0 394.0	ESL107M160AM5AA ESL127M160AM7AA
160	200	150	12.5x50	15	1240	0.910 0.910	490.0	ESL157M160AM7AA ESL157M160AKB(1)
160	200	150	16x30	15	1280	0.910	490.0	ESL157M160AM9AA
160	200	180	16x30	15	1360	0.810	586.0	ESL187M160AM9AA
160	200	220	18x30	15	1410	0.810	714.0	ESL227M160AN8AA
160	200	270	18x35	15	1500	0.670	874.0	ESL277M160ANAAA
160	200	330	18x40	15	1590	0.670	1066.0	ESL337M160AN3AA
200	250	2.2	6.3x11	15	75	14.500	18.8	ESL225M200AE3(1)
200	250	2.7	6.3x11	15	80	14.500	20.8	ESL275M200AE3(1)
VDC	VDC Surge	Rated Capacitance	Case Size	DF	RC	ESR	LC	Part Number

<sup>(1)</sup> Insert packaging code. See Ordering Options Table for available options.

<sup>\*</sup> When capacitance exceeds 1,000  $\mu$ F, the DF value (%) is increased by 2% for every additional 1,000  $\mu$ F.



Table 1 - Ratings & Part Number Reference cont.

		Rated		DF	RC	ESR	LC	
	VDC	Capacitance	Case Size	120 Hz	100 kHz	100 kHz	20°C	
VDC	Surge	120 Hz 20°C		20°C	100 KH2	20°C		Part Number
	Voltage		D x L (mm)				2 Minutes	
		(μF)		(tan δ %)*	(mA)	(Ω)	(µA)	
200	250	3.3	6.3x11	15	95	10.150	23.2	ESL335M200AE3(1)
200 200	250 250	3.9 4.7	6.3x11 8x11.5	15 15	105 130	10.150 10.150	25.6 28.8	ESL395M200AE3(1) ESL475M200AGM(1)
200	250	5.6	8x11.5	15	135	7.980	32.4	ESL565M200AGM(1)
200	250	6.8	8x11.5	15	145	7.980	37.2	ESL685M200AGM(1)
200	250	8.2	8x11.5	15	165	7.980	42.8	ESL825M200AGM(1)
200	250	10	8x12	15	175	3.650	50.0	ESL106M200AG9(1)
200 200	250 250	12 15	8x16 8x16	15 15	190 360	3.650 3.650	58.0 70.0	ESL126M200AG8(1) ESL156M200AG8(1)
200	250	18	10x16	15	385	3.240	82.0	ESL186M200AH8(1)
200	250	22	10x16	15	390	3.240	98.0	ESL226M200AH8(1)
200	250	27	10x20	15	410	2.380	118.0	ESL276M200AH4(1)
200	250	33	10x25	15	530	1.650	142.0	ESL336M200AH5(1)
200	250	39	12.5x20	15	620	1.380	166.0	ESL396M200AK5(1)
200 200	250 250	47 47	12.5x20 8x50	15 15	630 650	1.380 1.380	198.0 198.0	ESL476M200AK5(1) ESL476M200AGG(1)
200	250	56	10x50	15	670	1.250	234.0	ESL566M200AHE(1)
200	250	56	12.5x25	15	670	1.250	234.0	ESL566M200AK1(1)
200	250	68	12.5x30	15	850	1.250	282.0	ESL686M200AK2(1)
200	250	82	16x25	15	860	1.150	338.0	ESL826M200AM7AA
200 200	250 250	100 120	16x25 16x30	15 15	930 1090	1.150 1.030	410.0 490.0	ESL107M200AM7AA ESL127M200AM9AA
200	250	150	16x35	15	1125	1.030	610.0	ESL157M200AMPAA
200	250	180	18x30	15	1340	0.800	730.0	ESL187M200AN8AA
200	250	220	18x35	15	1420	0.740	890.0	ESL227M200ANAAA
250	300	2.2	6.3x11	15	80	10.150	21.0	ESL225M250AE3(1)
250	300	2.7	6.3x11	15	90	10.150	23.5	ESL275M250AE3(1)
250 250	300 300	3.3 3.9	6.3x11 8x11.5	15 15	100 110	10.150 10.150	26.5 29.5	ESL335M250AE3(1) ESL395M250AGM(1)
250	300	4.7	8x11.5	15	135	10.150	33.5	ESL475M250AGM(1)
250	300	5.6	8x11.5	15	150	9.000	38.0	ESL565M250AGM(1)
250	300	6.8	8x11.5	15	160	6.700	44.0	ESL685M250AGM(1)
250	300	8.2	8x12	15	170	3.650	51.0	ESL825M250AG9(1)
250 250	300 300	10 10	10x12.5 8x16	15 15	250 250	3.650 3.650	60.0 60.0	ESL106M250AH9(1) ESL106M250AG8(1)
250	300	15	10x16	15	390	3.240	85.0	ESL156M250AH8(1)
250	300	15	8x20	15	380	3.240	85.0	ESL156M250AG6(1)
250	300	18	10x16	15	410	3.240	100.0	ESL186M250AH8(1)
250	300	22	10x20	15	475	3.240	120.0	ESL226M250AH4(1)
250 250	300 300	33 33	12.5x20 8x50	15 15	570 570	1.380 1.380	175.0 175.0	ESL336M250AK5(1) ESL336M250AGG(1)
250	300	47	12.5x25	15	650	1.380	245.0	ESL476M250AGG(1)
250	300	56	12.5x30	15	750	1.250	290.0	ESL566M250AK2(1)
250	300	68	10x50	15	870	1.250	350.0	ESL686M250AHE(1)
250	300	68	12.5x30	15	870	1.250	350.0	ESL686M250AK2(1)
250	300 300	82 100	16x30 12.5x50	15 15	910	1.150	420.0 510.0	ESL826M250AM9AA
250 250	300	100 100	12.5x50 16x30	15	960 960	1.180 1.180	510.0 510.0	ESL107M250AKB(1) ESL107M250AM9AA
250	300	120	18x30	15	1210	1.020	610.0	ESL127M250AN8AA
250	300	150	18x30	15	1400	0.980	760.0	ESL157M250AN8AA
250	300	180	18x35	15	1540	0.740	910.0	ESL187M250ANAAA
250	300	220	18x40	15	1620	0.610	1110.0	ESL227M250AN3AA
350 350	400 400	1 1.2	6.3x11 6.3x11	20 20	55 55	21.500 21.500	17.0 18.4	ESL105M350AE3(1) ESL125M350AE3(1)
350	400	1.5	6.3x11	20	60	21.500	20.5	ESL155M350AE3(1)
350	400	1.8	6.3x11	20	65	21.500	22.6	ESL185M350AE3(1)
VDC	VDC Surge	Rated Capacitance	Case Size	DF	RC	ESR	LC	Part Number

<sup>(1)</sup> Insert packaging code. See Ordering Options Table for available options.

<sup>\*</sup> When capacitance exceeds 1,000  $\mu$ F, the DF value (%) is increased by 2% for every additional 1,000  $\mu$ F.



Table 1 - Ratings & Part Number Reference cont.

	WD 0	Rated		DF	RC	ESR	LC	
	VDC	Capacitance	Case Size	120 Hz	100 kHz	100 kHz	20°C	
VDC	Surge	120 Hz 20°C	D x L (mm)	20°C	105°C	20°C	2 Minutes	Part Number
	Voltage	(μF)	D X L (IIIII)	(tan δ %)*	(mA)	(Ω)	(µA)	
350	400	2.2	6.3x11	20	70	21.500	25.4	ESL225M350AE3(1)
350	400	2.7	8x11.5	20	85	15.710	28.9	ESL275M350AE3(1)
350	400	3.3	8x11.5	20	95	15.720	33.1	ESL335M350AGM(1)
350	400	3.9	8x11.5	20	100	15.720	37.3	ESL395M350AGM(1)
350	400	4.7	8x11.5	20	130	15.720	42.9	ESL475M350AGM(1)
350	400	5.6	10x12.5	20	155	10.510	49.2	ESL565M350AH9(1)
350 350	400 400	5.6 6.8	8x16 10x12.5	20 20	155 170	10.510 10.510	49.2 57.6	ESL565M350AG8(1) ESL685M350AH9(1)
350	400	8.2	10x12.5	20	240	7.500	67.4	ESL825M350AH8(1)
350	400	8.2	8x20	20	240	7.500	67.4	ESL825M350AG6(1)
350	400	10	10x16	20	250	7.500	80.0	ESL106M350AH8(1)
350	400	15	10x25	20	340	6.200	115.0	ESL156M350AH5(1)
350	400	15	12.5x15	20	340	6.200	115.0	ESL156M350AK7(1)
350 350	400 400	18 18	10x25 12.5x20	20 20	430 430	6.200 3.100	136.0 136.0	ESL186M350AH5(1)
350	400	22	12.5x20 12.5x20	20	475	3.100	164.0	ESL186M350AK5(1) ESL226M350AK5(1)
350	400	22	8x50	20	475	3.100	164.0	ESL226M350AGG(1)
350	400	33	10x50	20	570	2.250	241.0	ESL336M350AHE(1)
350	400	33	12.5x25	20	570	2.250	241.0	ESL336M350AK1(1)
350	400	47	16x25	20	800	2.250	339.0	ESL476M350AM7AA
350	400	56	16x30	20	840	2.020	402.0	ESL566M350AM9AA
350	400	68 68	12.5x50	20 20	880	1.380	486.0	ESL686M350AKB(1)
350 350	400 400	82	18x25 18x30	20	880 940	1.380 1.380	486.0 584.0	ESL686M350AN5AA ESL826M350AN8AA
350	400	100	18x35	20	1120	1.250	710.0	ESL107M350ANAAA
350	400	120	18x35	20	1200	1.250	850.0	ESL127M350ANAAA
400	450	1	6.3x11	20	65	25.000	18.0	ESL105M400AE3(1)
400	450	1.2	6.3x11	20	70	25.000	19.6	ESL125M400AE3(1)
400	450	1.5	6.3x11	20	75	25.000	22.0	ESL155M400AE3(1)
400	450 450	1.8 2.2	6.3x11 8x11.5	20 20	85 90	25.000 20.000	24.4 27.6	ESL185M400AE3(1)
400 400	450	2.7	8x11.5	20	95	15.720	31.6	ESL225M400AGM(1) ESL275M400AGM(1)
400	450	3.3	8x11.5	20	100	15.720	36.4	ESL335M400AGM(1)
400	450	3.9	8x11.5	20	105	15.720	41.2	ESL395M400AGM(1)
400	450	4.7	8x11.5	20	110	12.000	47.6	ESL475M400AGM(1)
400	450	4.7	8x16	20	115	12.000	47.6	ESL475M400AG8(1)
400	450	5.6	10x12.5	20	180	10.500	54.8	ESL565M400AH9(1)
400 400	450 450	5.6 6.8	8x16 10x16	20 20	160 220	10.510 8.700	54.8 64.4	ESL565M400AG8(1) ESL685M400AH8(1)
400	450	6.8	8x20	20	180	8.700	64.4	ESL685M400AG6(1)
400	450	8.2	10x16	20	252	7.500	75.6	ESL825M400AH8(1)
400	450	10	10x20	20	288	4.900	90.0	ESL106M400AH4(1)
400	450	15	12.5x20	20	400	4.200	130.0	ESL156M400AK5(1)
400	450	18	12.5x20	20	470	4.200	154.0	ESL186M400AK5(1)
400	450 450	22 22	12.5x25 8x50	20 20	475 475	2.250	186.0	ESL226M400AK1(1)
400 400	450 450	33	10x50	20	475 610	2.250 1.700	186.0 274.0	ESL226M400AGG(1) ESL336M400AHE(1)
400	450	33	16x25	20	610	1.700	274.0	ESL336M400AM7AA
400	450	47	18x25	20	795	1.700	386.0	ESL476M400AN5AA
400	450	56	12.5x50	20	820	1.700	458.0	ESL566M400AKB(1)
400	450	56	16x30	20	820	1.700	458.0	ESL566M400AM9AA
400	450	68	18x30	20	910	1.380	554.0	ESL686M400AN8AA
400 400	450 450	82 82	16x40 18x35	20 20	980 980	1.250	666.0 666.0	ESL826M400AM4AA ESL826M400ANAAA
400	450 450	100	18x40	20	980 1100	1.250 0.970	810.0	ESL107M400AN3AA
450	500	1.2	6.3x11	20	55	25.000	20.8	ESL125M450AE3(1)
VDC	VDC Surge	Rated Capacitance	Case Size	DF	RC	ESR	LC	Part Number

<sup>(1)</sup> Insert packaging code. See Ordering Options Table for available options.

<sup>\*</sup> When capacitance exceeds 1,000  $\mu$ F, the DF value (%) is increased by 2% for every additional 1,000  $\mu$ F.



Table 1 - Ratings & Part Number Reference cont.

VDC	VDC Surge Voltage	Rated Capacitance 120 Hz 20°C (µF)	Case Size D x L (mm)	DF 120 Hz 20°C (tan δ %)*	RC 100 kHz 105°C (mA)	ESR 100 kHz 20°C (Ω)	LC 20°C 2 Minutes (µA)	Part Number
450	500	1.5	8x11.5	20	80	25.000	23.5	ESL155M450AGM(1)
450	500	1.8	8x11.5	20	85	20.000	26.2	ESL185M450AGM(1)
450	500	2.2	8x16	20	95	15.720	29.8	ESL225M450AG8(1)
450	500	2.7	8x16	20	100	15.720	34.3	ESL275M450AG8(1)
450	500	3.3	8x16	20	110	15.720	39.7	ESL335M450AG8(1)
450	500	3.9	8x16	20	120	15.720	45.1	ESL395M450AG8(1)
450	500	4.7	10x16	20	150	10.510	52.3	ESL475M450AH8(1)
450	500	4.7	8x20	20	150	10.510	52.3	ESL475M450AG6(1)
450	500	5.6	10x16	20	180	7.500	60.4	ESL565M450AH8(1)
450	500	5.6	8x20	20	180	7.500	60.4	ESL565M450AG6(1)
450	500	6.8	10x16	20	220	7.500	71.2	ESL685M450AH8(1)
450	500	8.2	10x20	20	265	6.200	83.8	ESL825M450AH4(1)
450	500	10	10x25	20	305	6.200	100.0	ESL106M450AH5(1)
450	500	10	12.5x20	20	305	5.200	100.0	ESL106M450AK5(1)
450	500	15	12.5x20	20	400	5.200	145.0	ESL156M450AK5(1)
450	500	15	8x50	20	400	5.200	145.0	ESL156M450AGG(1)
450	500	18	12.5x25	20	470	3.600	172.0	ESL186M450AK1(1)
450	500	22	10x40	20	550	2.020	208.0	ESL226M450AHB(1)
450	500	22	16x20	20	550	2.020	208.0	ESL226M450AM5AA
450	500	33	10x50	20	665	1.820	307.0	ESL336M450AHE(1)
450	500	33	16x25	20	665	1.820	307.0	ESL336M450AM7AA
450	500	47	12.5x50	20	730	1.380	433.0	ESL476M450AKB(1)
450	500	47	16x35	20	730	1.380	433.0	ESL476M450AMPAA
450	500	56	16x35	20	750	1.380	514.0	ESL566M450AMPAA
450	500	68	18x35	20	970	1.250	622.0	ESL686M450ANAAA
450	500	82	18x40	20	1030	0.970	748.0	ESL826M450AN3AA
VDC	VDC Surge	Rated Capacitance	Case Size	DF	RC	ESR	LC	Part Number

<sup>(1)</sup> Insert packaging code. See Ordering Options Table for available options.

<sup>\*</sup> When capacitance exceeds 1,000  $\mu$ F, the DF value (%) is increased by 2% for every additional 1,000  $\mu$ F.