

### SINGLE-ENDED LEADS - General purpose 105°C / 1000 h

#### ■ Description

- Capacitors for high density printed circuit board.

#### ■ Applications

- Coupling, decoupling, by-pass, filtering.

#### ■ Features


- Case with  $\varnothing D \geq 6.0$  mm has the safety vent at the bottom.

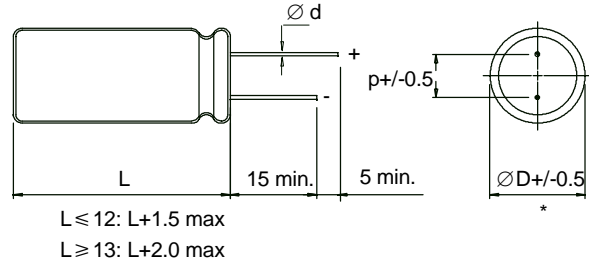
#### ■ Diagram of dimensions (Unit = mm).

$\varnothing D$	5.0	6.0	8.0	10.0	13.0	16.0	18.0	22.0
p (pitch)	2.0	2.5	3.5	5.0		7.5		10.0
$\varnothing d$ (leads)	0.5			0.6	0.8		0.8	

\* Case  $\varnothing D$  6.0mm: D = +0.8/-0.5

#### ■ Marking

- ARCOTRONICS' logo: 
- Series (ESE), Operating temperature (105°C), Rated capacitance ( $\mu F$ ), Rated voltage (Vdc).  
Negative polarity: white row



#### ■ Electrical characteristics

Rated voltage	6.3 to 100 Vdc	160 to 450 Vdc
Operating temperature	-40 to +105°C	-25 to +105°C
Capacitance range	0.47 $\mu F$ to 22 000 $\mu F$ .	0.47 $\mu F$ to 470 $\mu F$ .
Capacitance tolerance	$\pm 20\%$ at 120 Hz / 20°C	
Endurance test	1000 h (see conditions in Test method and performance)	
Leakage current	$I = 0.01 CV (\mu A) + 3\mu A$	$I = 0.03 CV (\mu A) + 10\mu A$
	C = rated capacitance ( $\mu F$ ); V = rated voltage (Vdc) (after that DC rated voltage at 20°C has been applied for 2 min)	

#### ■ Compensation factor of ripple current (R.C.) vs. frequency

Rated voltage	Capacitance range	50 Hz	120 Hz	300 Hz	1 kHz	10 to 100 kHz
6.3 to 100 Vdc	0.47 to 68 $\mu F$	0.75	1.00	1.20	1.30	1.45
6.3 to 100 Vdc	100 to 680 $\mu F$	0.75	1.00	1.10	1.15	1.25
6.3 to 100 Vdc	1000 to 22000 $\mu F$	0.75	1.00	1.05	1.10	1.15
160 to 450 Vdc	0.47 to 470 $\mu F$	0.80	1.00	1.05	1.10	1.50

#### ■ Compensation factor of ripple current (R.C.) vs. temperature

Temperature	65°C	85°C	105°C
Multiplier factors	1.80	1.40	1.00

#### ■ Test method and performance

Load life test	
<b>Test conditions</b>	
Voltage:	the sum of D.C. voltage and the peak A.C. voltage must not exceed the rated voltage of the capacitor.
Ripple current:	max permissible ripple current at 120Hz 105°C specified in the table.
Temperature:	105°C
Test duration:	1000 hours
<b>Performance</b>	
The following specifications will be satisfied when the capacitors are restored at 20°C.	
Capacitance Change:	within 20% of initial value
Dissipation Factor:	not exceed 200% of initial requirement
Leakage Current:	not exceed initial requirement

Shelf life test	
<b>Test conditions</b>	
Voltage:	no voltage applied.
Temperature:	105°C
Test duration:	500 hours
<b>Performance</b>	
The following specifications will be satisfied when the capacitors are restored at 20°C.	
Capacitance Change:	within 20% of initial value
Dissipation Factor:	not exceed 200% of initial requirement
Leakage Current:	not exceed initial requirement

### SINGLE-ENDED LEADS - General purpose 105°C / 1000 h

#### ■ Technical data and ordering codes

6.3 Vdc Rated voltage - 8 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
47	5 x 11	26	60	6	ESE476M6R3AC3AA
68	5 x 11	26	75	7	ESE686M6R3AC3AA
100	5 x 11	26	100	9	ESE107M6R3AC3AA
150	5 x 11	26	120	12	ESE157M6R3AC3AA
220	5 x 11	26	140	17	ESE227M6R3AC3AA
220	6 x 11	26	165	17	ESE227M6R3AE3AA
330	6 x 11	26	160	24	ESE337M6R3AE3AA
330	8 x 11	26	200	24	ESE337M6R3AG3AA
470	6 x 11	26	220	33	ESE477M6R3AE3AA
470	8 x 11	26	280	33	ESE477M6R3AG3AA
680	10 x 12	26	320	46	ESE687M6R3AH1AA
1000	8 x 11	26	370	66	ESE108M6R3AG3AA
1000	10 x 12	26	470	66	ESE108M6R3AH1AA
1500	10 x 15	26	600	97	ESE158M6R3AH2AA
2200	10 x 19	26	740	142	ESE228M6R3AH4AA
2200	13 x 20	26	930	142	ESE228M6R3AL3AA
3300	10 x 19	26	880	211	ESE338M6R3AH4AA
3300	13 x 20	26	1100	211	ESE338M6R3AL3AA
4700	13 x 25	26	1100	299	ESE478M6R3AL4AA
4700	16 x 15	26	1172	299	ESE478M6R3AM6AA
4700	16 x 25	26	1320	299	ESE478M6R3AM7AA
6800	13 x 25	26	1250	431	ESE688M6R3AL4AA
6800	16 x 25	26	1490	431	ESE688M6R3AM7AA
6800	18 x 16	26	1490	431	ESE688M6R3AN6AA
10000	16 x 25	26	1560	633	ESE109M6R3AM7AA
10000	16 x 32	26	1830	633	ESE109M6R3AM2AA
15000	16 x 36	26	1560	948	ESE159M6R3AM3AA
15000	18 x 36	26	1830	948	ESE159M6R3AN2AA
22000	18 x 40	26	2280	1389	ESE229M6R3AN3AA

10 Vdc Rated voltage - 13 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
22	5 x 11	22	45	5	ESE226M010AC3AA
33	5 x 11	22	60	6	ESE336M010AC3AA
47	5 x 11	22	75	8	ESE476M010AC3AA
68	5 x 11	22	80	10	ESE686M010AC3AA
100	5 x 11	22	110	13	ESE107M010AC3AA
150	6 x 11	22	130	18	ESE157M010AE3AA
220	6 x 11	22	180	25	ESE227M010AE3AA
330	8 x 11	22	255	36	ESE337M010AG3AA
470	8 x 11	22	305	50	ESE477M010AG3AA
680	10 x 12	22	420	71	ESE687M010AH1AA
1000	10 x 12	22	490	103	ESE108M010AH1AA
1000	10 x 15	22	570	103	ESE108M010AH2AA
1500	10 x 19	22	750	153	ESE158M010AH4AA
2200	10 x 19	22	800	223	ESE228M010AH4AA
2200	13 x 20	22	1010	223	ESE228M010AL3AA
3300	13 x 20	22	1050	333	ESE338M010AL3AA
3300	13 x 25	22	1220	333	ESE338M010AL4AA
4700	13 x 25	22	1190	473	ESE478M010AL4AA
4700	16 x 25	22	1410	473	ESE478M010AM7AA
6800	16 x 25	22	1370	683	ESE688M010AM7AA
6800	16 x 32	22	1610	683	ESE688M010AM2AA
10000	16 x 36	22	1760	1003	ESE109M010AM3AA
10000	18 x 36	22	1980	1003	ESE109M010AN2AA

16 Vdc Rated voltage - 20 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
10	5 x 11	18	25	5	ESE106M016AC3AA
15	5 x 11	18	40	5	ESE156M016AC3AA
22	5 x 11	18	55	6	ESE226M016AC3AA
33	5 x 11	18	70	8	ESE336M016AC3AA
47	5 x 11	18	85	10	ESE476M016AC3AA
68	5 x 11	18	100	14	ESE476M016AC3AA
100	5 x 11	18	110	19	ESE107M016AC3AA
100	6 x 11	18	135	19	ESE107M016AE3AA
150	8 x 11	18	180	27	ESE157M016AG3AA
220	6 x 11	18	180	38	ESE227M016AE3AA
220	8 x 11	18	235	38	ESE227M016AG3AA
330	8 x 11	18	285	56	ESE337M016AG3AA
470	8 x 11	18	310	78	ESE477M016AG3AA
470	8 x 15	18	395	78	ESE477M016AG4AA
470	10 x 12	18	395	78	ESE477M016AH1AA
680	10 x 15	18	530	112	ESE687M016AH2AA
1000	10 x 15	18	590	163	ESE108M016AH2AA
1000	10 x 19	18	700	163	ESE108M016AH4AA
1500	10 x 19	18	680	243	ESE158M016AH4AA
1500	13 x 20	18	860	243	ESE158M016AL3AA
2200	13 x 20	18	990	355	ESE228M016AL3AA
2200	13 x 25	18	1150	355	ESE228M016AL4AA
3300	13 x 25	18	1140	531	ESE338M016AL4AA
3300	16 x 25	18	1350	531	ESE338M016AM7AA
4700	16 x 25	18	1330	755	ESE478M016AM7AA
4700	16 x 32	18	1560	755	ESE478M016AM2AA
6800	16 x 36	18	1590	1091	ESE688M016AM3AA
6800	18 x 36	18	1790	1091	ESE688M016AN2AA
10000	18 x 36	18	2100	1603	ESE109M016AN2AA

25 Vdc Rated voltage - 32 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
4.7	5 x 11	16	20	4	ESE475M025AC3AA
6.8	5 x 11	16	25	5	ESE685M025AC3AA
10	5 x 11	16	30	5	ESE106M025AC3AA
15	5 x 11	16	45	7	ESE156M025AC3AA
22	5 x 11	16	60	8	ESE226M025AC3AA
33	5 x 11	16	75	11	ESE336M025AC3AA
47	5 x 11	16	90	15	ESE476M025AC3AA
68	6 x 11	16	125	20	ESE686M025AE3AA
100	6 x 11	16	145	28	ESE107M025AE3AA
150	8 x 11	16	200	40	ESE157M025AG3AA
220	8 x 11	16	200	58	ESE227M025AG3AA
220	10 x 12	16	250	58	ESE227M025AH1AA
330	8 x 15	16	320	85	ESE337M025AG4AA
330	10 x 12	16	355	85	ESE337M025AH1AA
470	10 x 12	16	400	120	ESE477M025AH1AA
470	10 x 15	16	470	120	ESE477M025AH2AA
680	10 x 19	16	650	173	ESE687M025AH4AA
1000	10 x 19	16	680	253	ESE108M025AH4AA
1000	13 x 20	16	855	253	ESE108M025AL3AA
1500	13 x 25	16	1020	378	ESE158M025AL4AA
2200	13 x 25	16	1030	553	ESE228M025AL4AA
2200	16 x 25	16	1230	553	ESE228M025AM7AA
3300	16 x 25	16	1230	828	ESE338M025AM7AA
3300	16 x 32	16	1450	828	ESE338M025AM2AA
4700	16 x 32	16	1420	1178	ESE478M025AM2AA
4700	18 x 36	16	1690	1178	ESE478M025AN2AA
6800	18 x 36	16	1850	1703	ESE688M025AN2AA

For capacitor whose capacitance exceeds 1000 µF, the value of D.F. (%) is increased by 2% for every addition of 1000 µF

### SINGLE-ENDED LEADS - General purpose 105°C / 1000 h

35 Vdc Rated voltage - 44 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
4.7	5 x 11	14	25	5	ESE475M035AC3AA
6.8	5 x 11	14	30	5	ESE685M035AC3AA
10	5 x 11	14	40	6	ESE106M035AC3AA
15	5 x 11	14	50	8	ESE156M035AC3AA
22	5 x 11	14	65	11	ESE226M035AC3AA
33	5 x 11	14	85	14	ESE336M035AC3AA
47	5 x 11	14	95	19	ESE476M035AC3AA
47	6 x 11	14	115	19	ESE476M035AE3AA
68	8 x 11	14	130	27	ESE686M035AG3AA
100	8 x 11	14	190	38	ESE107M035AG3AA
150	10 x 12	14	240	55	ESE157M035AH1AA
220	8 x 15	14	280	80	ESE227M035AG4AA
220	10 x 12	14	315	80	ESE227M035AH1AA
330	10 x 12	14	380	118	ESE337M035AH1AA
330	10 x 15	14	440	118	ESE337M035AH2AA
470	10 x 19	14	490	167	ESE477M035AH4AA
470	13 x 20	14	580	167	ESE477M035AL3AA
680	13 x 20	14	730	241	ESE687M035AL3AA
1000	13 x 20	14	850	353	ESE108M035AL3AA
1000	13 x 25	14	995	353	ESE108M035AL4AA
1500	16 x 25	14	1100	528	ESE158M035AM7AA
2200	16 x 25	14	1230	773	ESE228M035AM7AA
2200	16 x 32	14	1450	773	ESE228M035AM2AA
3300	16 x 36	14	1470	1158	ESE338M035AM3AA
3300	18 x 36	14	1660	1158	ESE338M035AN2AA
4700	18 x 36	14	1580	1648	ESE478M035AN2AA
4700	18 x 40	14	1750	1648	ESE478M035AN3AA

50 Vdc Rated voltage - 63 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
0.47	5 x 11	12	7	3	ESE474M050AC3AA
1.0	5 x 11	12	12	3	ESE105M050AC3AA
2.2	5 x 11	12	18	4	ESE225M050AC3AA
3.3	5 x 11	12	25	5	ESE335M050AC3AA
4.7	5 x 11	12	30	5	ESE475M050AC3AA
6.8	5 x 11	12	32	6	ESE685M050AC3AA
10	5 x 11	12	50	8	ESE106M050AC3AA
15	5 x 11	12	60	10	ESE156M050AC3AA
22	5 x 11	12	75	14	ESE226M050AC3AA
33	6 x 11	12	105	19	ESE336M050AE3AA
47	6 x 11	12	100	26	ESE476M050AE3AA
47	8 x 11	12	125	26	ESE476M050AG3AA
68	8 x 11	12	159	37	ESE686M050AG3AA
100	8 x 11	12	160	53	ESE107M050AG3AA
100	10 x 12	12	210	53	ESE107M050AH1AA
150	10 x 12	12	289	78	ESE157M050AH1AA
150	10 x 15	12	310	78	ESE157M050AH2AA
220	10 x 15	12	400	113	ESE227M050AH2AA
330	10 x 15	12	450	168	ESE337M050AH2AA
330	10 x 19	12	535	168	ESE337M050AH4AA
470	13 x 20	12	730	238	ESE477M050AL3AA
680	13 x 25	12	860	343	ESE687M050AL4AA
1000	13 x 25	12	930	503	ESE108M050AL4AA
1000	16 x 25	12	1110	503	ESE108M050AM7AA
1500	16 x 32	12	1350	753	ESE158M050AM2AA
2200	16 x 36	12	1360	1103	ESE228M050AM3AA
2200	18 x 36	12	1530	1103	ESE228M050AN2AA
3300	18 x 40	12	1700	1653	ESE338M050AN3AA
4700	22 x 35	12	1900	2353	ESE478M050AQ3AA

63 Vdc Rated voltage - 79 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
0.47	5 x 11	10	8	3	ESE474M063AC3AA
1.0	5 x 11	10	13	4	ESE105M063AC3AA
2.2	5 x 11	10	20	4	ESE225M063AC3AA
3.3	5 x 11	10	27	5	ESE335M063AC3AA
4.7	5 x 11	10	34	6	ESE475M063AC3AA
6.8	5 x 11	10	37	7	ESE685M063AC3AA
10	5 x 11	10	55	9	ESE106M063AC3AA
15	5 x 11	10	65	12	ESE156M063AC3AA
22	6 x 11	10	90	17	ESE226M063AE3AA
33	6 x 11	10	110	24	ESE336M063AE3AA
33	8 x 11	10	120	24	ESE336M063AG3AA
47	8 x 11	10	155	33	ESE476M063AG3AA
68	10 x 12	10	198	46	ESE686M063AH1AA
100	8 x 15	10	230	66	ESE107M063AG4AA
100	10 x 12	10	260	66	ESE107M063AH1AA
150	10 x 15	10	330	97	ESE157M063AH2AA
220	10 x 15	10	400	142	ESE227M063AH2AA
220	10 x 19	10	460	142	ESE227M063AH4AA
330	13 x 20	10	650	211	ESE337M063AL3AA
470	13 x 20	10	700	299	ESE477M063AL3AA
470	13 x 25	10	800	299	ESE477M063AL4AA
680	13 x 25	10	840	431	ESE687M063AL4AA
680	16 x 25	10	1000	431	ESE687M063AM7AA
1000	16 x 25	10	1020	633	ESE108M063AM7AA
1000	16 x 32	10	1200	633	ESE108M063AM2AA
1500	16 x 32	10	1300	948	ESE158M063AM2AA
1500	16 x 36	10	1450	948	ESE158M063AM3AA

100 Vdc Rated voltage - 125 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
0.47	5 x 11	10	10	3	ESE474M100AC3AA
1.0	5 x 11	10	15	4	ESE105M100AC3AA
2.2	5 x 11	10	22	5	ESE225M100AC3AA
3.3	5 x 11	10	29	6	ESE335M100AC3AA
4.7	5 x 11	10	37	8	ESE475M100AC3AA
6.8	5 x 11	10	46	10	ESE685M100AC3AA
10	5 x 11	10	55	13	ESE106M100AC3AA
10	6 x 11	10	65	13	ESE106M100AE3AA
15	8 x 11	10	82	18	ESE156M100AG3AA
22	8 x 11	10	115	25	ESE226M100AG3AA
33	8 x 11	10	120	36	ESE336M100AG3AA
33	10 x 12	10	160	36	ESE336M100AH1AA
47	10 x 12	10	180	50	ESE476M100AH1AA
47	10 x 15	10	210	50	ESE476M100AH2AA
68	10 x 15	10	241	71	ESE686M100AH2AA
100	10 x 19	10	385	103	ESE107M100AH4AA
150	13 x 25	10	414	153	ESE157M100AL4AA
220	13 x 25	10	590	223	ESE227M100AL4AA
330	13 x 25	10	600	333	ESE337M100AL4AA
330	16 x 25	10	720	333	ESE337M100AM7AA
470	16 x 25	10	740	473	ESE477M100AM7AA
470	16 x 32	10	875	473	ESE477M100AM2AA
680	16 x 36	10	1200	683	ESE687M100AM3AA
1000	18 x 40	10	1340	1003	ESE108M100AN3AA
1000	22 x 40	10	1500	1003	ESE108M100AQ4AA

For capacitor whose capacitance exceeds 1000 µF, the value of D.F. (%) is increased by 2% for every addition of 1000 µF

### SINGLE-ENDED LEADS - General purpose 105°C / 1000 h

160 Vdc Rated voltage - 200 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
0.47	5 x 11	15	12	12	ESE474M160AC3AA
1.0	5 x 11	15	17	15	ESE105M160AC3AA
2.2	6 x 11	15	25	20	ESE225M160AE3AA
3.3	6 x 11	15	30	26	ESE335M160AE3AA
3.3	8 x 11	15	36	26	ESE335M160AG3AA
4.7	6 x 11	15	34	32	ESE475M160AE3AA
4.7	8 x 11	15	43	32	ESE475M160AG3AA
6.8	10 x 12	15	54	43	ESE685M160AH1AA
10	8 x 11	15	56	58	ESE106M160AG3AA
10	8 x 15	15	70	58	ESE106M160AG4AA
10	10 x 12	15	70	58	ESE106M160AH1AA
15	10 x 15	15	90	82	ESE156M160AH2AA
22	10 x 15	15	130	116	ESE226M160AH2AA
33	10 x 19	15	180	168	ESE336M160AH4AA
47	13 x 20	15	270	236	ESE476M160AL3AA
68	13 x 25	15	300	336	ESE686M160AL4AA
100	13 x 25	15	330	490	ESE107M160AL4AA
100	16 x 25	15	400	490	ESE107M160AM7AA
150	16 x 32	15	435	730	ESE157M160AM2AA
220	16 x 32	15	550	1066	ESE227M160AM2AA
220	16 x 36	15	620	1066	ESE227M160AM3AA
330	18 x 36	15	770	1594	ESE337M160AN2AA
330	18 x 40	15	850	1594	ESE337M160AN3AA
470	22 x 40	15	980	2266	ESE477M160AQ4AA

200 Vdc Rated voltage - 250 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
0.47	5 x 11	15	14	13	ESE474M200AC3AA
1.0	5 x 11	15	19	16	ESE105M200AC3AA
2.2	6 x 11	15	22	23	ESE225M200AE3AA
2.2	8 x 11	15	28	23	ESE225M200AG3AA
3.3	6 x 11	15	32	30	ESE335M200AE3AA
3.3	8 x 11	15	40	30	ESE335M200AG3AA
4.7	8 x 11	15	40	38	ESE475M200AG3AA
4.7	10 x 12	15	50	38	ESE475M200AH1AA
6.8	10 x 12	15	60	51	ESE685M200AH1AA
10	10 x 12	15	69	70	ESE106M200AH1AA
10	10 x 15	15	80	70	ESE106M200AH2AA
15	10 x 15	15	110	100	ESE156M200AH2AA
22	10 x 15	15	140	142	ESE226M200AH2AA
33	10 x 19	15	190	208	ESE336M200AH4AA
47	13 x 20	15	240	292	ESE476M200AL3AA
47	13 x 25	15	290	292	ESE476M200AL4AA
68	13 x 25	15	330	418	ESE686M200AL4AA
100	16 x 25	15	410	610	ESE107M200AM7AA
150	16 x 36	15	450	910	ESE157M200AM3AA
220	18 x 36	15	580	1330	ESE227M200AN2AA
220	18 x 40	15	650	1330	ESE227M200AN3AA
330	18 x 40	15	780	1990	ESE337M200AN3AA
330	22 x 40	15	920	1990	ESE337M200AQ4AA

250 Vdc Rated voltage - 300 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
0.47	5 x 11	15	14	13	ESE474M250AC3AA
1.0	6 x 11	15	19	17	ESE105M250AE3AA
2.2	6 x 11	15	23	26	ESE225M250AE3AA
2.2	8 x 11	15	29	26	ESE225M250AG3AA
3.3	8 x 11	15	33	35	ESE335M250AG3AA
3.3	10 x 12	15	42	35	ESE335M250AH1AA
4.7	8 x 11	15	41	45	ESE475M250AG3AA
4.7	10 x 12	15	52	45	ESE475M250AH1AA
6.8	8 x 15	15	57	61	ESE685M250AG4AA
6.8	10 x 12	15	62	61	ESE685M250AH1AA
10	10 x 15	15	88	85	ESE106M250AH2AA
15	10 x 15	15	120	122	ESE156M250AH2AA
22	10 x 19	15	155	175	ESE226M250AH4AA
33	13 x 20	15	170	257	ESE336M250AL3AA
33	13 x 25	15	200	257	ESE336M250AL4AA
47	13 x 25	15	330	362	ESE476M250AL4AA
68	16 x 25	15	350	520	ESE686M250AM7AA
100	16 x 32	15	430	760	ESE107M250AM2AA
150	18 x 40	15	460	1135	ESE157M250AN3AA
220	22 x 40	15	680	1660	ESE227M250AQ4AA

350 Vdc Rated voltage - 400 Vdc Surge voltage					
Rated Cap. 120Hz 20°C (µF)	Case size D x L (mm)	D.F. 120Hz 25°C (tgδ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min (µA)	Arcotronics P/N
0.47	5 x 11	20	14	15	ESE474M350AC3AA
1.0	6 x 11	20	20	20	ESE105M350AE3AA
2.2	8 x 11	20	35	33	ESE225M350AG3AA
3.3	8 x 11	20	37	45	ESE335M350AG3AA
3.3	10 x 12	20	47	45	ESE335M350AH1AA
4.7	10 x 12	20	47	59	ESE475M350AH1AA
4.7	10 x 15	20	55	59	ESE475M350AH2AA
6.8	10 x 15	20	65	81	ESE685M350AH2AA
10	10 x 15	20	95	115	ESE106M350AH2AA
15	10 x 19	20	140	167	ESE156M350AH4AA
22	13 x 20	20	165	241	ESE226M350AL3AA
33	13 x 25	20	220	356	ESE336M350AL4AA
47	16 x 25	20	340	503	ESE476M350AM7AA
68	16 x 32	20	370	724	ESE686M350AM2AA
100	18 x 36	20	460	1060	ESE107M350AN2AA
150	22 x 40	20	480	1585	ESE157M350AQ4AA

### SINGLE-ENDED LEADS - General purpose 105°C / 1000 h

400 Vdc Rated voltage - 450 Vdc Surge voltage					
Rated Cap. 120Hz 20°C ( $\mu$ F)	Case size D x L (mm)	D.F. 120Hz 25°C (tg $\delta$ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min ( $\mu$ A)	Arcotronics P/N
0.47	6 x 11	20	14	16	ESE474M400AE3AA
1.0	6 x 11	20	16	22	ESE105M400AE3AA
1.0	8 x 11	20	20	22	ESE105M400AG3AA
2.2	8 x 11	20	28	36	ESE225M400AG3AA
2.2	10 x 12	20	35	36	ESE225M400AH1AA
3.3	8 x 11	20	38	50	ESE335M400AG3AA
3.3	10 x 12	20	50	50	ESE335M400AH1AA
4.7	10 x 12	20	49	66	ESE475M400AH1AA
4.7	10 x 15	20	57	66	ESE475M400AH2AA
6.8	10 x 19	20	72	92	ESE685M400AH4AA
10	10 x 19	20	77	130	ESE106M400AH4AA
10	13 x 20	20	97	130	ESE106M400AL3AA
15	10 x 19	20	100	190	ESE156M400AH4AA
15	13 x 25	20	150	190	ESE156M400AL4AA
22	13 x 20	20	150	274	ESE226M400AL3AA
22	13 x 25	20	175	274	ESE226M400AL4AA
33	13 x 25	20	190	406	ESE336M400AL4AA
33	16 x 25	20	230	406	ESE336M400AM7AA
47	16 x 25	20	280	574	ESE476M400AM7AA
68	18 x 25	20	300	826	ESE686M400AN5AA
68	18 x 36	20	380	826	ESE686M400AN2AA
100	18 x 36	20	480	1210	ESE107M400AN2AA

450 Vdc Rated voltage - 500 Vdc Surge voltage					
Rated Cap. 120Hz 20°C ( $\mu$ F)	Case size D x L (mm)	D.F. 120Hz 25°C (tg $\delta$ %)	R.C. 120Hz 105°C (mA <sub>rms</sub> )	L.C. 20°C 2 min ( $\mu$ A)	Arcotronics P/N
0.47	6 x 11	20	14	16	ESE474M450AE3AA
1.0	8 x 11	20	20	23	ESE105M450AG3AA
2.2	10 x 12	20	35	40	ESE225M450AH1AA
3.3	10 x 15	20	54	54	ESE335M450AH2AA
4.7	10 x 15	20	60	73	ESE475M450AH2AA
6.8	10 x 19	20	80	102	ESE685M450AH4AA
10	13 x 20	20	85	145	ESE106M450AL3AA
10	13 x 25	20	100	145	ESE106M450AL4AA
15	16 x 25	20	160	212	ESE156M450AM7AA
22	16 x 25	20	150	307	ESE226M450AM7AA
22	16 x 32	20	180	307	ESE226M450AM2AA
33	16 x 25	20	190	455	ESE336M450AM7AA
33	16 x 36	20	240	455	ESE336M450AM3AA
47	16 x 36	20	300	644	ESE476M450AM3AA
47	18 x 40	20	360	644	ESE476M450AN3AA
68	22 x 40	20	400	928	ESE686M450AQ4AA