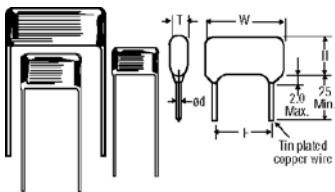


Type MDD Film Capacitors



- ▶ Non-Inductive Construction
- ▶ Non-Combustible, Epoxy Coated
- ▶ Capacitance Tolerance: ±10%
- ▶ 250 VDC Rated (130 VAC), 400 VDC (200 VAC), and 630 VDC (250 VAC)
- ▶ MDD Series Crosses to Panasonic ECQ-EXXXXXZ, S Series

These resin coated metallized polyester film capacitors are rated 250 VDC and 130 VAC at 60 Hz. **Capacitance Tolerance:** ±10%. **Operating Temperature:** -40°C to +85°C. Non-inductive construction. Non-combustible and epoxy coated. **Insulation Resistance:** Less than 0.33 µF ≥10,000 MΩ × µF. **Dissipation Factor:** ≤1% at 1 kHz. **Stress Voltage Test:** Rated voltage × 1.5 for one minute.

250 VDC (130 VAC at 60 Hz)

Stock No.	Mfr.'s Type	Cap. Mfd.	Dimensions (mm)					EACH	
			W max.	T max.	H max.	d max.	F max.	1-99	100-499
998-2101	MDD-22E103K	0.010	12.5	5.0	9.0	0.6	10.0	.30	.20
998-2105	MDD-22E473K	0.047	12.5	5.0	9.5	0.6	10.0	.24	.17
998-1007	MDD-22E823K	0.082	12.5	5.5	10.5	0.6	10.0	.33	.23
998-2106	MDD-22E104K	0.100	12.5	5.5	11.0	0.6	10.0	.28	.20
998-1010	MDD-22E184K	0.180	17.5	6.0	11.0	0.6	15.0	.30	.24
998-2107	MDD-22E224K	0.220	17.5	6.5	12.5	0.6	15.0	.29	.24
998-2108	MDD-22E334K	0.330	23.0	6.0	12.0	0.8	20.0	.35	.30
998-2109	MDD-22E474K	0.470	23.0	7.0	13.0	0.8	20.0	.42	.35
998-2110	MDD-22E684K	0.680	23.0	8.5	14.0	0.8	20.0	.51	.42
998-1014	MDD-22E924K	0.920	31.0	7.5	13.5	0.8	27.5	.57	.46
998-2111	MDD-22E105K	1.000	31.0	8.5	14.0	0.8	27.5	.63	.54
998-2113	MDD-22E225K	2.200	31.0	10.5	20.5	0.8	27.5	1.01	.85

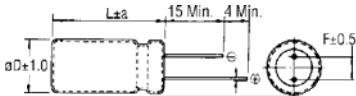
400 VDC/200 VAC

Stock No.	Mfr.'s Type	Cap. Mfd.	W max.	T max.	H max.	d max.	F max.	EACH	
								1-99	100-499
998-0401	MDD-22G103K	0.010	14.0	5.0	9.0	0.6	10.5	.32	.23
998-0402	MDD-22G123K	0.012	14.0	5.5	9.0	0.6	10.5	.33	.24
998-0403	MDD-22G153K	0.015	14.0	5.0	9.5	0.6	10.5	.33	.24
998-0405	MDD-22G223K	0.022	14.0	5.5	10.0	0.6	10.5	.23	.19
998-0409	MDD-22G473K	0.047	14.0	7.0	12.0	0.6	10.5	.33	.28
998-0413	MDD-22G104K	0.100	17.0	7.5	14.5	0.6	13.5	.36	.31
998-0417	MDD-22G224K	0.220	24.5	8.5	15.5	0.8	20.5	.48	.40
998-0421	MDD-22G474K	0.470	29.5	10.0	17.5	0.8	25.5	.67	.57
998-0423	MDD-22G684K	0.680	29.5	12.0	19.0	0.8	25.5	.98	.82
998-0425	MDD-22G105K	1.000	29.5	15.0	22.0	0.8	25.5	1.30	1.06

630 VDC/250 VAC

Stock No.	Mfr.'s Type	Cap. Mfd.	W max.	T max.	H max.	d max.	F max.	EACH	
								1-99	100-499
998-0601	MDD-22J103K	0.010	14.0	5.5	9.0	0.6	10.5	.25	.21
998-0603	MDD-22J153K	0.015	14.0	6.0	10.5	0.6	10.5	.25	.21
998-0604	MDD-22J183K	0.018	14.0	6.0	11.0	0.6	10.5	.30	.23
998-0605	MDD-22J223K	0.022	14.0	6.5	12.0	0.6	10.5	.30	.23
998-0607	MDD-22J333K	0.033	17.0	6.0	12.0	0.6	13.5	.31	.26
998-0609	MDD-22J473K	0.047	17.0	7.0	13.5	0.6	13.5	.33	.28
998-0612	MDD-22J823K	0.082	17.0	9.0	16.0	0.6	13.5	.43	.36
998-0613	MDD-22J104K	0.100	24.5	7.0	14.0	0.8	20.5	.46	.37
998-0616	MDD-22J184K	0.180	24.5	10.0	17.0	0.8	20.5	.68	.59
998-0617	MDD-22J224K	0.220	29.5	9.5	17.0	0.8	25.5	.57	.51

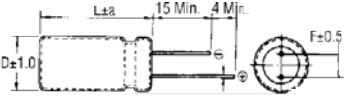
SH7 Series Electrolytic Capacitors



All devices in our SH7 series electrolytics are 7 mm in height. Values are available from .1 µF to 220 µF but stocked in 1, 2.2, 4.7, 10 and 47 µF. Voltage ratings are from 6.3 V to 63 V but stocked in 16, 25, 35 and 63 V. **Lead Spacing:** 4 mm diameter — 1.5 mm; 5 mm diameter — 2.0 mm; 6.3 mm diameter — 2.5 mm. **Operating Temperature:** -40° to +105°C. **Capacitance Tolerance:** ±20%. Also available in tape and reel, and ammo pack as a special order item.

Stock No.	Mfr.'s Type	WV DC	Cap. µF	Dim. (mm)		EACH		
				D	L	1-99	100-499	500-999
998-8503	25SH747	25	47	6.3	7.00	.24	.14	.10
998-8549	35SH710	35	10	5.0	7.00	.24	.14	.10
998-8506	35SH747R	35	4.7	4.0	7.00	.24	.14	.10

Radial Lead Electrolytic Capacitors

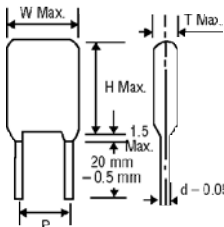


Compact, electrolytic capacitors for original equipment or replacement use in all kinds of communications equipment. **Operating Temperature:** -40° to +85°C. **Capacitance Tolerance:** ±20%. **Life:** 2000 hours at +85°C. **Rated Working Voltage Range:** 10 VDC to 100 VDC. **Capacitance Range:** 0.47 mfd to 10,000 mfd. Straight leads. Solvent proof type, long life.

Lead Spacing and Dia. — L ≤ 20.0 a = 1.5, L > 20.0 a = 2

Stock No.	Mfr.'s Type	WV DC	Cap. µF	Dimensions (mm)		EACH		
				D	L	1-99	100-499	500-999
998-1327	10MR100	10	100	5.0	11.0	.20	.14	.10
998-1345	10MR220	10	220	6.3	11.0	.24	.17	.13
998-1378	10MR470	10	470	8.0	11.5	.23	.19	.17
998-1382	10MR1000	10	1000	10.0	16.0	.32	.27	.23
998-1385	10MR2200	10	2200	13.0	20.0	.56	.47	.40
998-1391	10MR4700	10	4700	13.0	25.0	.91	.77	.66
998-1398	10MR10000	10	10000	18.0	35.5	1.79	1.66	1.40
998-1356	16MR330	16	330	8.0	11.5	.33	.24	.21
998-1339	16MR470	16	470	8.0	11.5	.31	.26	.21
998-1341	16MR1000	16	1000	10.0	20.0	.43	.36	.31
998-1310	16MR2200	16	2200	13.0	25.0	.82	.69	.59
998-1389	16MR3300	16	3300	16.0	25.0	1.05	.90	.76
998-1312	16MR4700	16	4700	16.0	31.5	1.46	1.19	1.01
998-1338	16MR6800	16	6800	18.0	35.5	2.32	1.67	1.29
998-1324	25MR47	25	47	6.0	11.0	.21	.14	.11
998-1358	25MR100	25	100	6.3	11.0	.26	.19	.14
998-1334	25MR220	25	220	8.0	11.5	.25	.21	.19
998-1357	25MR330	25	330	10.0	12.5	.33	.28	.23
998-1359	25MR470	25	470	10.0	16.0	.41	.35	.30
998-1383	25MR1000	25	1000	13.0	20.0	.59	.49	.42
998-1386	25MR2200	25	2200	13.0	25.0	1.05	.90	.76
998-1390	25MR3300	25	3300	16.0	31.5	1.57	1.27	1.09
998-1392	25MR4700	25	4700	18.0	35.5	2.06	1.67	1.41
998-1362	35MR33	35	33	5.0	11.0	.20	.14	.10
998-1374	35MR100	35	100	8.0	11.5	.32	.21	.17
998-1335	35MR220	35	200	10.0	12.5	.33	.28	.23
998-1375	35MR330	35	330	10.0	16.0	.41	.35	.31
998-1380	35MR470	35	470	10.0	20.0	.63	.53	.44
998-1360	35MR1000	35	1000	13.0	25.0	.86	.65	.56
998-1367	35MR2200	35	2200	16.0	31.5	1.57	1.27	1.09
998-1363	35MR3300	35	3300	18.0	35.5	2.23	1.67	1.41
998-1307	50MR22	50	22	5.0	11.0	.21	.15	.11
998-1325	50MR47	50	47	6.3	11.0	.24	.17	.14
998-1352	50MR100	50	100	8.0	11.5	.22	.18	.16
998-1347	50MR220	50	220	10.0	16.0	.49	.35	.28
998-1376	50MR330	50	330	10.0	20.0	.43	.37	.32
998-1321	50MR470	50	470	13.0	20.0	.63	.54	.46
998-1364	50MR1000	50	1000	16.0	25.0	1.08	.88	.76
998-1343	50MR2200	50	2200	18.0	35.5	1.89	1.55	1.32
998-1369	63MR10	63	10	5.0	11.0	.20	.14	.09
998-1370	63MR22	63	22	6.3	11.0	.30	.17	.13
998-1371	63MR33	63	33	6.3	11.0	.24	.17	.14
998-1372	63MR47	63	47	8.0	11.5	.23	.20	.16
998-1373	63MR100	63	100	10.0	12.5	.34	.29	.26
998-1379	63MR220	63	220	10.0	20.0	.63	.46	.36
998-1394	63MR330	63	330	13.0	20.0	.68	.55	.46
998-1395	63MR470	63	470	13.0	25.0	.99	.83	.71
998-1329	100MR047	100	.47	5.0	11.0	.23	.15	.11
998-1397	100MR1R0	100	1	5.0	11.0	.20	.14	.10
998-1330	100MR2R2	100	2.2	5.0	11.0	.20	.14	.10
998-1331	100MR3R3	100	3.3	5.0	11.0	.24	.15	.11
998-1337	100MR4R7	100	4.7	5.0	11.0	.21	.15	.11

Epoxy Coated Polyester Film Capacitors



**Design and Construction.** **Dielectric:** Polyester film (polyethylene terephthalate film). **Electrode:** Aluminum foil — inductive wind — welded tabs. **Winding:** Fully automatic. **Terminals:** Copper plated steel wire with solder coat (straight leads). **Coverage:** Coated with epoxy resin (dipping method).

Rated Values and Characteristics

**Nominal Capacitance:** 0.001 mfd. to 0.47 mfd. **Capacitance Tolerance:** ±10%. **Rated DC Voltage:** 100 V. **Temperature Range:** -40°C to +85°C. **Test Voltage:** 200% of rated DC voltage for 60 sec. **Insulation Resistance:** More than 9,000 M ohms, avg. 100,00 M ohms at 20°C. **Dissipation Factor (Tan Theta):** Below 0.8%, avg. 0.4% at 1,000 Hz, 20°C.

Stock No.	Mfr.'s Type	Cap. Mfd.	Dimensions (mm)					EACH	
			W max.	H max.	T max.	P ±1.0	d	1-99	100-499
998-0044	DEP100V102KB	0.0010	5.5	11.5	3.0	3.0	0.5	.15	.09
998-0045	DEP100V122KB	0.0012	5.5	11.5	3.0	3.0	0.5	.09	.06
998-0046	DEP100V152KB	0.0015	5.5	11.5	3.0	3.0	0.5	.09	.05
998-0047	DEP100V182KB	0.0018	5.5	11.5	3.0	3.0	0.5	.15	.09
998-0048	DEP100V222KB	0.0022	5.5	11.5	3.0	3.0	0.5	.15	.09
998-0049	DEP100V272KB	0.0027	5.5	11.5	3.0	3.0	0.5	.12	.08
998-0050	DEP100V332KB	0.0033	5.5	11.5	3.0	3.0	0.5	.12	.08
998-0051	DEP100V392KB	0.0039	5.5	11.5	3.0	3.0	0.5	.12	.08
998-0052	DEP100V472KB	0.0047	6.0	11.5	3.0	3.5	0.5	.12	.08
998-0053	DEP100V562KB	0.0056	6.0	11.5	3.0	3.5	0.5	.12	.08
998-0054	DEP100V682KB	0.0068	6.0	11.5	3.0	3.5	0.5	.12	.08
998-0055	DEP100V822KB	0.0082	6.5	12.0	3.5	3.5	0.5	.12	.08
998-0056	DEP100V103KB	0.0100	6.5	12.0	3.5	4.0	0.5	.12	.09
998-0058	DEP100V153KB	0.0150	7.0	12.0	3.5	4.0	0.5	.17	.10
998-0059	DEP100V183KB	0.0180	7.0	12.0	4.0	4.0	0.5	.15	.10
998-0060	DEP100V223KB	0.0220	8.0	12.0	4.0	4.0	0.5	.18	.11
998-0061	DEP100V273KB	0.0270	8.0	12.0	4.0	4.0	0.5	.18	.11
998-0062	DEP100V333KB	0.0330	9.0	11.0	4.0	4.0	0.5	.20	.12
998-0064	DEP100V473KB	0.0470	10.0	12.5	5.0	6.0	0.5	.21	.13
998-0065	DEP100V563KB	0.0560	9.5	12.5	5.0	6.0	0.5	.23	.14
998-0066	DEP100V683KB	0.0680	10.0	12.5	5.5	7.0	0.5	.26	.15
998-0068	DEP100V104KB	0.1000	11.0	12.5	6.5	7.0	0.5	.24	.16
998-0070	DEP100V154KB	0.1500	12.5	13.5	7.5	7.0	0.6	.26	.19
998-0072	DEP100V224KB	0.2200	14.0	16.0	7.5	8.0	0.6	.41	.28
998-0074	DEP100V334KB	0.3300	15.0	20.0	8.0	9.0	0.6	.49	.34
998-0076	DEP100V474KB	0.4700	16.5	21.0	9.5	10.0	0.6	.68	.39