



**THE DATASHEET OF
UPS1H471MHD**



UPS

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D×L (mm)	tan δ	Leakage Current (μ A) (at 20°C after 1 minute)	Impedance (Ω) max. (20°C/100kHz)	Rated Ripple (mArms)		Part Number
						105°C/ 100kHz	105°C/ 120Hz	
6.3 (0J)	22	5×11	0.24	4.158	1.50	160	—	※UPS0J220MDD
	33	5×11	0.24	6.237	1.50	160	—	※UPS0J330MDD
	47	5×11	0.24	8.883	1.50	160	—	※UPS0J470MDD
	100	5×11	0.24	18.9	1.50	160	—	※UPS0J101MDD
	150	6.3×11	0.24	28.35	0.50	250	—	※UPS0J151MED
	220	6.3×11	0.24	41.58	0.50	250	—	※UPS0J221MED
	330	6.3×11	0.24	62.37	0.50	250	—	※UPS0J331MED
	470	8×11.5	0.24	88.83	0.28	410	—	UPS0J471MPD
	680	10×12.5	0.24	128.52	0.19	600	—	UPS0J681MPD
	1000	10×12.5	0.24	189	0.19	600	—	UPS0J102MPD
	1500	10×20	0.24	283.5	0.11	1000	—	UPS0J152MPD
	2200	12.5×20	0.26	415.8	0.075	1250	—	UPS0J222MHD
	3300	12.5×20	0.28	623.7	0.075	1250	—	UPS0J332MHD
	4700	16×25	0.30	888.3	0.038	1900	—	UPS0J472MHD
	6800	16×25	0.34	1285.2	0.038	1900	—	UPS0J682MHD
	10000	16×30.5	0.42	1890	0.033	2350	—	UPS0J103MHD
15000	18×35.5	0.52	2835	0.030	2700	—	UPS0J153MHD	
10 (1A)	22	5×11	0.20	6.6	1.50	160	—	※UPS1A220MDD
	33	5×11	0.20	9.9	1.50	160	—	※UPS1A330MDD
	47	5×11	0.20	14.1	1.50	160	—	※UPS1A470MDD
	100	5×11	0.20	30	1.50	160	—	※UPS1A101MDD
	150	6.3×11	0.20	45	0.50	250	—	※UPS1A151MED
	220	6.3×11	0.20	66	0.50	250	—	※UPS1A221MED
	330	8×11.5	0.20	99	0.28	410	—	UPS1A331MPD
	470	8×11.5	0.20	141	0.28	410	—	UPS1A471MPD
	680	10×12.5	0.20	204	0.19	600	—	UPS1A681MPD
	1000	10×16	0.20	300	0.14	800	—	UPS1A102MPD
	1500	10×20	0.20	450	0.11	1000	—	UPS1A152MPD
	2200	12.5×20	0.22	660	0.075	1250	—	UPS1A222MHD
	3300	12.5×25	0.24	990	0.057	1550	—	UPS1A332MHD
	4700	16×25	0.26	1410	0.038	1900	—	UPS1A472MHD
	6800	16×30.5	0.30	2040	0.033	2350	—	UPS1A682MHD
	10000	18×35.5	0.38	3000	0.030	2700	—	UPS1A103MHD
15000	18×40	0.48	4500	0.027	3300	—	UPS1A153MHD	
16 (1C)	10	5×11	0.16	4.8	1.50	160	—	※UPS1C100MDD
	22	5×11	0.16	10.56	1.50	160	—	※UPS1C220MDD
	33	5×11	0.16	15.84	1.50	160	—	※UPS1C330MDD
	47	5×11	0.16	22.56	1.50	160	—	※UPS1C470MDD
	100	6.3×11	0.16	48	0.50	250	—	※UPS1C101MED
	150	6.3×11	0.16	72	0.50	250	—	※UPS1C151MED
	220	8×11.5	0.16	105.6	0.28	410	—	UPS1C221MPD
	330	8×11.5	0.16	158.4	0.28	410	—	UPS1C331MPD
	470	10×12.5	0.16	225.6	0.19	600	—	UPS1C471MPD
	680	10×16	0.16	326.4	0.14	800	—	UPS1C681MPD
	1000	10×20	0.16	480	0.11	1000	—	UPS1C102MPD
	1500	12.5×20	0.16	720	0.075	1250	—	UPS1C152MHD

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

UPS

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Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D \times L (mm)	tan δ	Leakage Current (μ A) (at 20°C after 1 minute)	Impedance (Ω) max. (20°C/100kHz)	Rated Ripple (mArms)		Part Number
						105°C/ 100kHz	105°C/ 120Hz	
16 (1C)	2200	12.5 \times 25	0.18	1056	0.057	1550	—	UPS1C222MHD
	3300	16 \times 25	0.20	1584	0.038	1900	—	UPS1C332MHD
	4700	16 \times 30.5	0.22	2256	0.033	2350	—	UPS1C472MHD
	6800	18 \times 35.5	0.26	3264	0.030	2700	—	UPS1C682MHD
	10000	18 \times 40	0.34	4800	0.027	3300	—	UPS1C103MHD
25 (1E)	4.7	5 \times 11	0.14	4	1.50	160	—	※UPS1E4R7MDD
	10	5 \times 11	0.14	7.5	1.50	160	—	※UPS1E100MDD
	22	5 \times 11	0.14	16.5	1.50	160	—	※UPS1E220MDD
	33	5 \times 11	0.14	24.75	1.50	160	—	※UPS1E330MDD
	47	5 \times 11	0.14	35.25	1.50	160	—	※UPS1E470MDD
	100	6.3 \times 11	0.14	75	0.50	250	—	※UPS1E101MED
	150	8 \times 11.5	0.14	112.5	0.28	410	—	UPS1E151MPD
	220	8 \times 11.5	0.14	165	0.28	410	—	UPS1E221MPD
	330	10 \times 12.5	0.14	247.5	0.19	600	—	UPS1E331MPD
	470	10 \times 16	0.14	352.5	0.14	800	—	UPS1E471MPD
	680	10 \times 20	0.14	510	0.11	1000	—	UPS1E681MPD
	1000	12.5 \times 20	0.14	750	0.075	1250	—	UPS1E102MHD
	1500	16 \times 25	0.14	1125	0.038	1900	—	UPS1E152MHD
	2200	16 \times 25	0.16	1650	0.038	1900	—	UPS1E222MHD
	3300	16 \times 30.5	0.18	2475	0.033	2350	—	UPS1E332MHD
4700	18 \times 35.5	0.20	3525	0.030	2700	—	UPS1E472MHD	
6800	18 \times 40	0.24	5100	0.027	3300	—	UPS1E682MHD	
35 (1V)	4.7	5 \times 11	0.12	4.935	1.50	160	—	※UPS1V4R7MDD
	10	5 \times 11	0.12	10.5	1.50	160	—	※UPS1V100MDD
	22	5 \times 11	0.12	23.1	1.50	160	—	※UPS1V220MDD
	33	5 \times 11	0.12	34.65	1.50	160	—	※UPS1V330MDD
	47	6.3 \times 11	0.12	49.35	0.50	250	—	※UPS1V470MED
	100	8 \times 11.5	0.12	105	0.28	410	—	UPS1V101MPD
	150	8 \times 11.5	0.12	157.5	0.28	410	—	UPS1V151MPD
	220	10 \times 12.5	0.12	231	0.19	600	—	UPS1V221MPD
	330	10 \times 16	0.12	346.5	0.14	800	—	UPS1V331MPD
	470	10 \times 20	0.12	493.5	0.11	1000	—	UPS1V471MPD
	680	12.5 \times 20	0.12	714	0.075	1250	—	UPS1V681MHD
	1000	12.5 \times 25	0.12	1050	0.057	1550	—	UPS1V102MHD
	1500	16 \times 25	0.12	1575	0.038	1900	—	UPS1V152MHD
	2200	16 \times 30.5	0.14	2310	0.033	2350	—	UPS1V222MHD
	3300	18 \times 35.5	0.16	3465	0.030	2700	—	UPS1V332MHD
4700	18 \times 40	0.18	4935	0.027	3300	—	UPS1V472MHD	
50 (1H)	2.2	5 \times 11	0.10	4	4.50	55	—	※UPS1H2R2MDD
	3.3	5 \times 11	0.10	4.95	3.90	65	—	※UPS1H3R3MDD
	4.7	5 \times 11	0.10	7.05	3.50	90	—	※UPS1H4R7MDD
	10	5 \times 11	0.10	15	2.10	120	—	※UPS1H100MDD
	22	5 \times 11	0.10	33	1.80	150	—	※UPS1H220MDD
	33	6.3 \times 11	0.10	49.5	0.65	250	—	※UPS1H330MED
	47	6.3 \times 11	0.10	70.5	0.65	250	—	※UPS1H470MED
	100	8 \times 11.5	0.10	150	0.36	340	—	UPS1H101MPD

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Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D \times L (mm)	tan δ	Leakage Current (μ A) (at 20°C after 1 minute)	Impedance (Ω) max. (20°C/100kHz)	Rated Ripple (mArms)		Part Number
						105°C/ 100kHz	105°C/ 120Hz	
50 (1H)	150	10 \times 12.5	0.10	225	0.26	490	—	UPS1H151MPD
	220	10 \times 16	0.10	330	0.18	650	—	UPS1H221MPD
	330	10 \times 20	0.10	495	0.15	810	—	UPS1H331MPD
	470	12.5 \times 20	0.10	705	0.13	1100	—	UPS1H471MHD
	680	12.5 \times 25	0.10	1020	0.10	1200	—	UPS1H681MHD
	1000	16 \times 25	0.10	1500	0.058	1600	—	UPS1H102MHD
	1500	16 \times 30.5	0.10	2250	0.040	2000	—	UPS1H152MHD
	2200	18 \times 35.5	0.12	3300	0.035	2300	—	UPS1H222MHD
63 (1J)	4.7	5 \times 11	0.09	8.883	4.70	68	—	※UPS1J4R7MDD
	10	5 \times 11	0.09	18.9	2.10	110	—	※UPS1J100MDD
	22	6.3 \times 11	0.09	41.58	0.98	180	—	※UPS1J220MED
	33	6.3 \times 11	0.09	62.37	0.71	220	—	※UPS1J330MED
	47	8 \times 11.5	0.09	88.83	0.65	310	—	UPS1J470MPD
	100	10 \times 12.5	0.09	189	0.31	390	—	UPS1J101MPD
	150	10 \times 16	0.09	283.5	0.25	440	—	UPS1J151MPD
	220	10 \times 20	0.09	415.8	0.20	700	—	UPS1J221MPD
	330	12.5 \times 20	0.09	623.7	0.12	980	—	UPS1J331MHD
	470	12.5 \times 25	0.09	888.3	0.081	1200	—	UPS1J471MHD
	680	16 \times 25	0.09	1285.2	0.058	1300	—	UPS1J681MHD
	1000	16 \times 30.5	0.09	1890	0.049	1380	—	UPS1J102MHD
	1500	18 \times 35.5	0.09	2835	0.038	1750	—	UPS1J152MHD
2200	18 \times 40	0.11	4158	0.032	2120	—	UPS1J222MHD	
100 (2A)	2.2	5 \times 11	0.08	6.6	9.80	44	—	※UPS2A2R2MDD
	3.3	5 \times 11	0.08	9.9	6.60	58	—	※UPS2A3R3MDD
	4.7	5 \times 11	0.08	14.1	4.60	74	—	※UPS2A4R7MDD
	10	6.3 \times 11	0.08	30	1.80	130	—	※UPS2A100MED
	22	8 \times 11.5	0.08	66	0.68	230	—	UPS2A220MPD
	33	10 \times 12.5	0.08	99	0.46	320	—	UPS2A330MPD
	47	10 \times 16	0.08	141	0.37	420	—	UPS2A470MPD
	100	12.5 \times 20	0.08	300	0.18	580	—	UPS2A101MHD
	150	12.5 \times 25	0.08	450	0.13	710	—	UPS2A151MHD
	220	16 \times 25	0.08	660	0.10	890	—	UPS2A221MHD
	330	16 \times 25	0.08	990	0.090	1080	—	UPS2A331MHD
	470	16 \times 30.5	0.08	1410	0.076	1310	—	UPS2A471MHD
	680	16 \times 35.5	0.08	2040	0.064	1410	—	UPS2A681MHD
	1000	18 \times 40	0.08	3000	0.047	1520	—	UPS2A102MHD

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Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D \times L (mm)	tan δ	Leakage Current (μ A) (at 20°C after 1 minute)	Rated Ripple (mArms)		Part Number
					105°C/ 100kHz	105°C/ 120Hz	
160 (2C)	0.47	6.3 \times 11	0.15	47.52	—	12	※UPS2CR47MED
	1	6.3 \times 11	0.15	56	—	17	※UPS2C010MED
	2.2	6.3 \times 11	0.15	75.2	—	25	※UPS2C2R2MED
	3.3	8 \times 11.5	0.15	92.8	—	36	※UPS2C3R3MPD
	4.7	8 \times 11.5	0.15	115.2	—	43	※UPS2C4R7MPD
	10	10 \times 12.5	0.15	164	—	70	※UPS2C100MPD
	22	10 \times 20	0.15	240.8	—	130	※UPS2C220MPD
	33	12.5 \times 20	0.15	311.2	—	180	※UPS2C330MHD
	47	12.5 \times 25	0.15	400.8	—	220	※UPS2C470MHD
	100	16 \times 25	0.15	740	—	330	※UPS2C101MHD
	220	18 \times 35.5	0.15	1508	—	500	※UPS2C221MHD
	220	20 \times 31	0.15	1508	—	500	※UPS2C221MRD6
	330	20 \times 40	0.15	2212	—	900	※UPS2C331MRD
470	22 \times 50	0.15	3108	—	1200	※UPS2C471MRD	
200 (2D)	0.47	6.3 \times 11	0.15	49.4	—	12	※UPS2DR47MED
	1	6.3 \times 11	0.15	60	—	17	※UPS2D010MED
	2.2	6.3 \times 11	0.15	84	—	25	※UPS2D2R2MED
	3.3	8 \times 11.5	0.15	106	—	36	※UPS2D3R3MPD
	4.7	10 \times 12.5	0.15	134	—	50	※UPS2D4R7MPD
	10	10 \times 16	0.15	180	—	80	※UPS2D100MPD
	22	10 \times 20	0.15	276	—	140	※UPS2D220MPD
	33	12.5 \times 25	0.15	364	—	190	※UPS2D330MHD
	47	12.5 \times 25	0.15	476	—	220	※UPS2D470MHD
	100	16 \times 30.5	0.15	900	—	335	※UPS2D101MHD
	220	18 \times 40	0.15	1860	—	515	※UPS2D221MHD
	220	20 \times 35	0.15	1860	—	515	※UPS2D221MRD6
	330	22 \times 40	0.15	2740	—	1100	※UPS2D331MRD
470	22 \times 50	0.15	3860	—	1310	※UPS2D471MRD	
250 (2E)	0.47	6.3 \times 11	0.15	51.75	—	12	※UPS2ER47MED
	1	6.3 \times 11	0.15	65	—	17	※UPS2E010MED
	2.2	8 \times 11.5	0.15	95	—	29	※UPS2E2R2MPD
	3.3	10 \times 12.5	0.15	122.5	—	42	※UPS2E3R3MPD
	4.7	10 \times 12.5	0.15	147	—	50	※UPS2E4R7MPD
	10	10 \times 20	0.15	200	—	88	※UPS2E100MPD
	22	12.5 \times 25	0.15	320	—	155	※UPS2E220MHD
	33	12.5 \times 25	0.15	430	—	190	※UPS2E330MHD
	47	16 \times 25	0.15	570	—	230	※UPS2E470MHD
	100	18 \times 35.5	0.15	1100	—	340	※UPS2E101MHD
	100	20 \times 31	0.15	1100	—	340	※UPS2E101MRD6
	220	20 \times 40	0.15	2300	—	525	※UPS2E221MRD
	330	22 \times 50	0.15	3400	—	1150	※UPS2E331MRD
470	25 \times 50	0.15	4800	—	1350	※UPS2E471MRD	

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					105°C/ 100kHz	105°C/ 120Hz	
315 (2F)	0.47	8 × 11.5	0.20	54.805	—	11	※UPS2FR47MPD
	1	8 × 11.5	0.20	71.5	—	16	※UPS2F010MPD
	2.2	10 × 12.5	0.20	109.3	—	28	※UPS2F2R2MPD
	3.3	10 × 12.5	0.20	141.58	—	34	※UPS2F3R3MPD
	4.7	10 × 16	0.20	159.22	—	45	※UPS2F4R7MPD
	10	10 × 20	0.20	226	—	72	※UPS2F100MPD
	22	12.5 × 25	0.20	377.2	—	120	※UPS2F220MHD
	33	16 × 25	0.20	515.8	—	155	※UPS2F330MHD
	47	16 × 35.5	0.20	692.2	—	190	※UPS2F470MHD
	100	18 × 40	0.20	1360	—	285	※UPS2F101MHD
	100	20 × 35	0.20	1360	—	285	※UPS2F101MRD6
220	22 × 50	0.20	2872	—	540	※UPS2F221MRD	
350 (2V)	0.47	8 × 11.5	0.20	56.45	—	11	※UPS2VR47MPD
	1	10 × 12.5	0.20	75	—	17	※UPS2V010MPD
	2.2	10 × 16	0.20	117	—	31	※UPS2V2R2MPD
	3.3	10 × 16	0.20	146.2	—	38	※UPS2V3R3MPD
	4.7	10 × 20	0.20	165.8	—	49	※UPS2V4R7MPD
	10	12.5 × 20	0.20	240	—	82	※UPS2V100MHD
	22	16 × 25	0.20	408	—	130	※UPS2V220MHD
	33	16 × 30.5	0.20	562	—	160	※UPS2V330MHD
	47	18 × 35.5	0.20	758	—	200	※UPS2V470MHD
	47	20 × 31	0.20	758	—	200	※UPS2V470MRD6
	100	20 × 40	0.20	1500	—	290	※UPS2V101MRD
220	25 × 50	0.20	3180	—	550	※UPS2V221MRD	
400 (2G)	1	10 × 12.5	0.25	80	—	16	※UPS2G010MPD
	2.2	10 × 16	0.25	128	—	27	※UPS2G2R2MPD
	3.3	10 × 20	0.25	152.8	—	36	※UPS2G3R3MPD
	4.7	10 × 20	0.25	175.2	—	43	※UPS2G4R7MPD
	10	12.5 × 25	0.25	260	—	72	※UPS2G100MHD
	22	16 × 25	0.25	452	—	110	※UPS2G220MHD
	33	16 × 30.5	0.25	628	—	140	※UPS2G330MHD
	47	18 × 35.5	0.25	852	—	170	※UPS2G470MHD
	47	20 × 31	0.25	852	—	170	※UPS2G470MRD6
100	22 × 50	0.25	1700	—	350	※UPS2G101MRD	
450 (2W)	1	10 × 12.5	0.25	85	—	18	※UPS2W010MPD
	2.2	10 × 20	0.25	139	—	29	※UPS2W2R2MPD
	3.3	12.5 × 20	0.25	159.4	—	41	※UPS2W3R3MHD
	4.7	12.5 × 20	0.25	184.6	—	49	※UPS2W4R7MHD
	10	16 × 25	0.25	280	—	75	※UPS2W100MHD
	22	16 × 30.5	0.25	496	—	115	※UPS2W220MHD
	33	18 × 35.5	0.25	694	—	145	※UPS2W330MHD
	33	20 × 31	0.25	694	—	145	※UPS2W330MRD6
	47	20 × 40	0.25	946	—	175	※UPS2W470MRD
100	25 × 50	0.25	1900	—	350	※UPS2W101MRD	

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

• For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

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