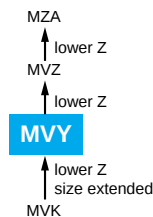


Alchip®MVY Series

- Expand up to $\phi 18$ case size
- Expand up to 100V_{dc}
- Low impedance, 105°C 1000 to 5000-hours-life
- For digital equipment, especially DC-DC converters and VRM
- Solvent-proof type except 80 & 100V_{dc} (see PRECAUTIONS AND GUIDELINES)
- Pb-free design



SPECIFICATIONS

Items	Characteristics											
Category												
Temperature Range	-55 to +105℃ (6.3 to 63V _{dc}) -40 to +105℃ (80 & 100V _{dc})											
Rated Voltage Range	6.3 to 100V _{dc}											
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)											
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 2 minutes)											
Dissipation Factor (tanδ)	Rated voltage (V _{dc})		6.3V	10V	16V	25V	35V	50V	63V	80V	100V	When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase. (at 20℃, 120Hz)
	tanδ (Max.)	D55 to F80	0.24	0.20	0.16	0.14	0.12	0.12	—	—	—	
		HA0 & JA0	0.28	0.24	0.20	0.16	0.14	0.12	—	—	—	
		KE0 to MN0	0.26	0.22	0.18	0.16	0.14	0.12	0.14	0.10	0.10	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})		6.3V	10V	16V	25V	35V	50V	63V	80V	100V	(at 120Hz)
	Z(-40℃)/Z(+20℃)	D55 to JA0	3	2	2	2	2	—	—	—		
		KE0 to MN0	10	8	6	4	3	3	3	3	3	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for specified time at 105℃.											
	Time	D55 to F80 : 1000 hours HA0 & JA0 : 2000 hours KE0 to MN0 : 5000 hours										
	Rated voltage	6.3V _{dc} (D55 to JA0)					6.3 to 100V _{dc}					
	Capacitance change	≤±30% of the initial value					≤±20% of the initial value					
	D.F. (tanδ)	≤300% of the initial specified value					≤200% of the initial specified value					
	Leakage current	≤The initial specified value					≤The initial specified value					
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1000 hours at 105℃ without voltage applied.											
	Rated voltage	6.3V _{dc} (D55 to JA0)					6.3 to 100V _{dc}					
	Capacitance change	≤±30% of the initial value					≤±20% of the initial value					
	D.F. (tanδ)	≤300% of the initial specified value					≤200% of the initial specified value					
	Leakage current	≤The initial specified value					≤The initial specified value					

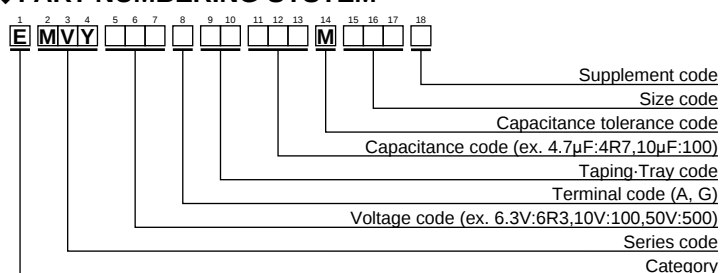
DIMENSIONS [mm]

- Terminal Code : A
- Size code : D55 to KG5
- Terminal Code : G
- Size code : LH0 to MN0



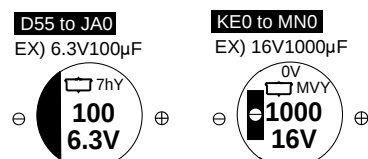
Size code	φD	L	A	B	C	W	P
D55	4	5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55	5	5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55	6.3	5.2	6.6	6.6	7.2	0.5 to 0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5
KE0	12.5	13.5	13.0	13.0	13.7	1.0 to 1.3	4.2
KG5	12.5	16.0	13.0	13.0	13.7	1.0 to 1.3	4.2
LH0	16	16.5	17.0	17.0	18.0	1.0 to 1.3	6.5
LN0	16	21.5	17.0	17.0	18.0	1.0 to 1.3	6.5
MH0	18	16.5	19.0	19.0	20.0	1.0 to 1.3	6.5
MN0	18	21.5	19.0	19.0	20.0	1.0 to 1.3	6.5

PART NUMBERING SYSTEM



Please refer to "A guide to global code (surface mount type)"

MARKING



◆STANDARD RATINGS

□ is non solvent-proof (80/100V_{dc}).

WV (V _{dc})	Cap (μF)	Size code	Impedance (Ω _{max} /20°C, 100kHz)	Rated ripple current (mA _{rms} /105°C, 100kHz)	Part No.	WV (V _{dc})	Cap (μF)	Size code	Impedance (Ω _{max} /20°C, 100kHz)	Rated ripple current (mA _{rms} /105°C, 100kHz)	Part No.
6.3	22	D55	3.0	60	EMVY6R3ADA220MD55G	25	330	HA0	0.30	450	EMVY250ADA331MHA0G
	33	E55	1.8	95	EMVY6R3ADA330ME55G		470	JA0	0.15	670	EMVY250ADA471MJA0G
	47	E55	1.8	95	EMVY6R3ADA470ME55G		1000	LH0	0.054	1260	EMVY250GTR102MLH0S
	100	F55	1.0	140	EMVY6R3ADA101MF55G		1000	MH0	0.054	1350	EMVY250GTR102MMH0S
	220	F55	1.0	140	EMVY6R3ADA221MF55G		2200	LN0	0.038	1630	EMVY250GTR222MLN0S
	330	F80	0.34	280	EMVY6R3ADA331MF80G		2200	MN0	0.038	1750	EMVY250GTR222MMN0S
	470	HA0	0.30	450	EMVY6R3ADA471MHA0G		3300	MN0	0.038	1750	EMVY250GTR332MMN0S
	680	HA0	0.30	450	EMVY6R3ADA681MHA0G	35	4.7	D55	3.0	60	EMVY350ADA471MD55G
	1000	HA0	0.30	450	EMVY6R3ADA102MHA0G		10	E55	1.8	95	EMVY350ADA100ME55G
	1500	JA0	0.15	670	EMVY6R3ADA152MJA0G		22	F55	1.0	140	EMVY350ADA220MF55G
	2200	KE0	0.07	820	EMVY6R3ADA222MKE0S		33	F55	1.0	140	EMVY350ADA330MF55G
	2200	LH0	0.054	1260	EMVY6R3GTR222MLH0S		47	F55	1.0	140	EMVY350ADA470MF55G
	3300	KG5	0.060	950	EMVY6R3ADA332MKG5S		68	F80	0.34	280	EMVY350ADA680MF80G
	3300	MH0	0.054	1350	EMVY6R3GTR332MMH0S		100	HA0	0.30	450	EMVY350ADA101MHA0G
	4700	LN0	0.038	1630	EMVY6R3GTR472MLN0S		220	HA0	0.30	450	EMVY350ADA221MHA0G
	4700	MH0	0.054	1350	EMVY6R3GTR472MMH0S		330	JA0	0.15	670	EMVY350ADA331MJA0G
	6800	LN0	0.038	1630	EMVY6R3GTR682MLN0S		470	KE0	0.070	820	EMVY350ADA471MKE0S
	6800	MN0	0.038	1750	EMVY6R3GTR682MMN0S		470	LH0	0.054	1260	EMVY350GTR471MLH0S
	8200	MN0	0.038	1750	EMVY6R3GTR822MMN0S		1000	LH0	0.054	1260	EMVY350GTR102MLH0S
							1000	MH0	0.054	1350	EMVY350GTR102MMH0S
							2200	MN0	0.038	1750	EMVY350GTR222MMN0S
10	22	E55	1.8	95	EMVY100ADA220ME55G	50	1.0	D55	5.0	30	EMVY500ADA1R0MD55G
	33	E55	1.8	95	EMVY100ADA330ME55G		2.2	D55	5.0	30	EMVY500ADA2R2MD55G
	47	F55	1.0	140	EMVY100ADA470MF55G		3.3	D55	5.0	30	EMVY500ADA3R3MD55G
	100	F55	1.0	140	EMVY100ADA101MF55G		4.7	E55	3.0	50	EMVY500ADA4R7ME55G
	220	F80	0.34	280	EMVY100ADA221MF80G		10	F55	2.0	70	EMVY500ADA100MF55G
	330	HA0	0.30	450	EMVY100ADA331MHA0G		22	F55	2.0	70	EMVY500ADA220MF55G
	470	HA0	0.30	450	EMVY100ADA471MHA0G		33	F80	0.6	170	EMVY500ADA330MF80G
	680	JA0	0.15	670	EMVY100ADA681MJA0G		47	F80	0.6	170	EMVY500ADA470MF80G
	1000	JA0	0.15	670	EMVY100ADA102MJA0G		68	HA0	0.6	300	EMVY500ADA680MHA0G
	2200	KG5	0.060	950	EMVY100ADA222MKG5S		100	HA0	0.6	300	EMVY500ADA101MHA0G
	2200	LH0	0.054	1260	EMVY100GTR222MLH0S		220	JA0	0.30	500	EMVY500ADA221MJA0G
	3300	LH0	0.054	1260	EMVY100GTR332MLH0S		330	KE0	0.11	650	EMVY500ADA331MKE0S
	3300	MH0	0.054	1350	EMVY100GTR332MMH0S		330	LH0	0.087	900	EMVY500GTR331MLH0S
	4700	LN0	0.038	1630	EMVY100GTR472MLN0S		470	LH0	0.087	900	EMVY500GTR471MLH0S
	4700	MN0	0.038	1750	EMVY100GTR472MMN0S	63	470	MH0	0.087	1060	EMVY500GTR471MMH0S
	6800	MN0	0.038	1750	EMVY100GTR682MMN0S		1000	MN0	0.050	1520	EMVY500GTR102MMN0S
16	10	D55	3.0	60	EMVY160ADA100MD55G		68	KE0	0.19	500	EMVY630ADA680MKE0S
	22	E55	1.8	95	EMVY160ADA220ME55G		100	KE0	0.19	500	EMVY630ADA101MKE0S
	33	F55	1.0	140	EMVY160ADA330MF55G		220	KE0	0.19	500	EMVY630ADA221MKE0S
	47	F55	1.0	140	EMVY160ADA470MF55G		220	LH0	0.12	845	EMVY630GTR221MLH0S
	100	F55	1.0	140	EMVY160ADA101MF55G		330	LH0	0.12	845	EMVY630GTR331MLH0S
	220	F80	0.34	280	EMVY160ADA221MF80G		330	MH0	0.12	905	EMVY630GTR331MMH0S
	330	HA0	0.30	450	EMVY160ADA331MHA0G		470	LN0	0.085	1100	EMVY630GTR471MLN0S
	470	HA0	0.30	450	EMVY160ADA471MHA0G		470	MH0	0.12	905	EMVY630GTR471MMH0S
	680	JA0	0.15	670	EMVY160ADA681MJA0G	80	100	KE0	0.33	450	EMVY800ADA101MKE0S
	1000	KE0	0.070	820	EMVY160ADA102MKE0S		220	KG5	0.26	550	EMVY800ADA221MKG5S
	1000	LH0	0.054	1260	EMVY160GTR102MLH0S		330	LN0	0.16	900	EMVY800GTR331MLN0S
	2200	LH0	0.054	1260	EMVY160GTR222MLH0S		330	MH0	0.24	700	EMVY800GTR331MMH0S
	2200	MH0	0.054	1350	EMVY160GTR222MMH0S		470	MN0	0.16	950	EMVY800GTR471MMN0S
25	3300	LN0	0.038	1630	EMVY160GTR332MLN0S	100	47	KE0	0.33	450	EMVY101ADA470MKE0S
	3300	MH0	0.054	1350	EMVY160GTR332MMH0S		68	KE0	0.33	450	EMVY101ADA680MKE0S
	4700	MN0	0.038	1750	EMVY160GTR472MMN0S		100	KE0	0.33	450	EMVY101ADA101MKE0S
							100	LH0	0.24	650	EMVY101GTR101MLH0S
							220	LN0	0.16	900	EMVY101GTR221MLN0S
							220	MH0	0.24	700	EMVY101GTR221MMH0S
							330	MN0	0.16	950	EMVY101GTR331MMN0S

□□ : Taping / Tray code