Alchip™-MZE Series

- Endurance : 8,000 hours at 105℃
- Low impedance
- Rated voltage range : 6.3 to 50V
- Nominal capacitance range : 47 to 470μF
- Suitable for long life and low profile products
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant

MVY → (Longer life) → MLA → (Longer life) → **MZE**

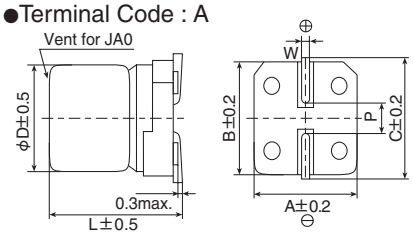


◆SPECIFICATIONS

Items	Characteristics						
Category Temperature Range	-25 to +105℃						
Rated Voltage Range	6.3 to 50Vdc						
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 (tan δ)	Rated voltage (Vdc)	6.3V	16V	25V	35V	50V	
	tan δ (Max.)	0.32	0.26	0.16	0.14	0.14	(at 20℃,120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage(Vdc)	6.3V	16V	25V	35V	50V	
	Z(-10℃)/Z(+20℃)	4	2	2	2	2	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 8,000 hours at 105℃.						
	Capacitance change	≦±30% of the initial value					
	D.F. (tan δ)	≦300% of the initial specified value					
	Leakage current	≦The initial specified value					
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.						
	Capacitance change	≦±30% of the initial value					
	D.F. (tan δ)	≦300% of the initial specified value					
	Leakage current	≦The initial specified value					

◆DIMENSIONS [mm]

●Terminal Code : A



Size code	D	L	A	B	C	W	P
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

◆PART NUMBERING SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
E	M	Z	E				A	R	A				M				G

- Supplement code
- Size code
- Capacitance tolerance code
- Capacitance code (ex. 47μF:470,100μF:101)
- Taping code
- Terminal code
- Voltage code (ex. 6.3V:6R3, 25V:250)
- Series code
- Category

Please refer to "Product code guide (surface mount type)"

◆MARKING

EX) 50V47μF



●Rated voltage symbol

Rated voltage (Vdc)	6.3	16	25	35	50
Symbol	j	C	E	V	H

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Size code	Impedance (Ω max./20℃, 100kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
6.3	470	HA0	0.22	600	EMZE6R3ARA471MHA0G
16	330	HA0	0.22	600	EMZE160ARA331MHA0G
	470	JA0	0.16	850	EMZE160ARA471MJA0G
25	220	HA0	0.22	600	EMZE250ARA221MHA0G
	330	JA0	0.16	850	EMZE250ARA331MJA0G
35	100	HA0	0.22	600	EMZE350ARA101MHA0G
	220	JA0	0.16	850	EMZE350ARA221MJA0G
50	47	HA0	0.53	350	EMZE500ARA470MHA0G
	100	JA0	0.35	670	EMZE500ARA101MJA0G

◆RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	120	1k	10k	100k
47, 100	0.40	0.75	0.90	1.00
220 to 470	0.50	0.85	0.94	1.00

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.

Product specifications in this catalog are subject to change without notice.Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

■ Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.

■ Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.

■ The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.

■ The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.
Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.

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The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products

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In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

Part Numbering System
Part Numbering System (Appendix)
Standardization
Available Items by Manufacturing Locations
Environmental Measures
Technical Note
Precautions and Guidelines
Recommended Soldering Conditions
Taping, Lead-preforming and Packaging
Available Terminals for Snap-in and Screw Mount Type

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