Alchip™-MZE Series

- Endurance : 7,000 to 8,000 hours at 105℃
- Low impedance
- Rated voltage range : 6.3 to 50V
- Nominal capacitance range : 10 to 470μF
- Suitable for long life and low profile products
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant

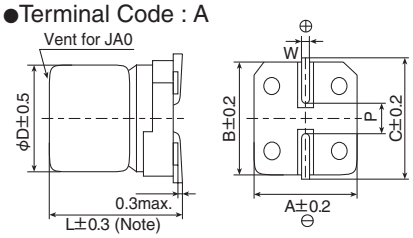
MVY → (Longer life) MLA → (Longer life) **MZE**

◆SPECIFICATIONS

Items	Characteristics							
Category Temperature Range	-25 to +105℃							
Rated Voltage Range	6.3 to 50V_{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 (tan δ)	Rated voltage (V_{dc})	6.3V	10V	16V	25V	35V	50V	
	tan δ (Max.)	0.32	0.28	0.26	0.16	0.14	0.14	(at 20℃,120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage(V_{dc})	6.3V	10V	16V	25V	35V	50V	
	Z(-10℃)/Z(+20℃)	4	3	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 specified time at 105℃.							
	Time	E73 & F73 : 7,000 hours F90 to JA0 : 8,000 hours						
	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]

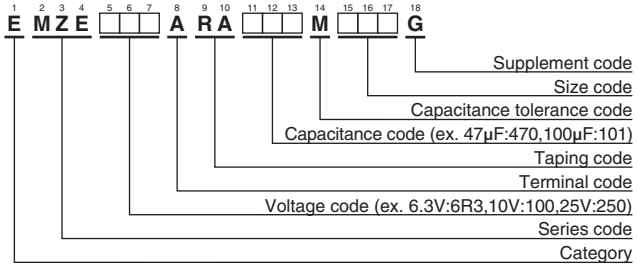
●Terminal Code : A



Note : L±0.5 for HA0 and JA0

Size code	D	L	A	B	C	W	P
E73	5	7.0	5.3	5.3	5.9	0.5 to 0.8	1.4
F73	6.3	7.0	6.6	6.6	7.2	0.5 to 0.8	1.9
F90	6.3	8.7	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

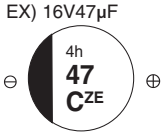
◆PART NUMBERING SYSTEM



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

◆MARKING

EX) 16V47μF



●Rated voltage symbol

Rated voltage (V_{dc})	6.3	10	16	25	35	50
Symbol	j	A	C	E	V	H

Alchip™-MZE Series

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Size code	Impedance (Ω max./20℃, 100kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
6.3	47	E73	2.2	95	EMZE6R3ARA470ME73G
	100	F73	1.1	140	EMZE6R3ARA101MF73G
	220	F90	1.0	230	EMZE6R3ARA221MF90G
	330	F90	1.0	230	EMZE6R3ARA331MF90G
	470	HA0	0.22	600	EMZE6R3ARA471MHA0G
10	33	E73	2.2	95	EMZE100ARA330ME73G
	150	F73	1.1	140	EMZE100ARA151MF73G
16	22	E73	2.2	95	EMZE160ARA220ME73G
	47	F73	1.1	140	EMZE160ARA470MF73G
	100	F73	1.1	140	EMZE160ARA101MF73G
	150	F90	1.0	230	EMZE160ARA151MF90G
	220	F90	1.0	230	EMZE160ARA221MF90G
	330	HA0	0.22	600	EMZE160ARA331MHA0G
	470	JA0	0.16	850	EMZE160ARA471MJA0G
25	22	E73	2.2	95	EMZE250ARA220ME73G

WV (V_{dc})	Cap (μF)	Size code	Impedance (Ω max./20℃, 100kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
25	33	F73	1.1	140	EMZE250ARA330MF73G
	47	F73	1.1	140	EMZE250ARA470MF73G
	100	F90	1.0	230	EMZE250ARA101MF90G
	220	HA0	0.22	600	EMZE250ARA221MHA0G
	330	JA0	0.16	850	EMZE250ARA331MJA0G
35	10	E73	2.2	95	EMZE350ARA100ME73G
	10	F73	1.1	140	EMZE350ARA100MF73G
	22	E73	2.2	95	EMZE350ARA220ME73G
	22	F73	1.1	140	EMZE350ARA220MF73G
	33	F90	1.0	230	EMZE350ARA330MF90G
	47	F90	1.0	230	EMZE350ARA470MF90G
	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

Production of the products shown in [ ] is scheduled to be discontinued.

◆RATED RIPPLE CURRENT MULTIPLIERS

❶Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	120	1k	10k	100k
10 to 150	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.

■ 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.

■ We strongly recommend our customers to purchase Nippon Chemi-Con products only through our official sales channels. We assume no responsibility for any defects or damages caused by using products purchased from outside our official sales channel or of counterfeit goods. In addition, we will ask the customer to pay the investigation cost for products purchased outside our official sales channel.

■ We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.
The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products

■ We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.
In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

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