Alchip™-MZR Series

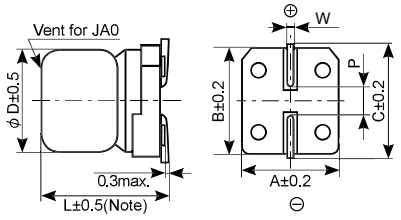
- Downsizing and Lower ESR, 2,000 hours at 105℃
- Rated voltage range : 6.3 to 50V, Nominal capacitance range : 150 to 2,200μF
- Solvent resistant type
- Vibration resistant structure
- **RoHS Compliant**

◆ SPECIFICATIONS

Items	Characteristics							
Category Temperature Range	-55 to +105℃							
Rated Voltage Range	6.3 to 50Vdc							
Capacitance Tolerance	±20% (M)							(at 20℃ , 120Hz)
Leakage Current	I=0.01CV or 3μA, which 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	10V	16V	25V	35V	50V	
	tan δ (Max.)	0.26	0.19	0.16	0.14	0.12	0.10	(at 20℃ , 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	6.3V	10V	16V	25V	35V	50V	
	Z(-25℃)/Z(+20℃)	2	2	2	2	2	2	
	Z(-40℃)/Z(+20℃)	3	3	3	3	3	3	
	Z(-55℃)/Z(+20℃)	4	4	4	3	3	3	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 2,000 hours at 105℃.							
	Capacitance change	≦ ±30% of the initial value						
	D.F. (tan δ)	≦ 200% 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)	≦ 200% of the initial specified value						
	Leakage current	≦ The initial specified value						
Surge Voltage Test	The capacitors shall be subjected to 1,000 cycles each consisting of charging with the specified surge voltage for 30±5 seconds through a protective resistor (as required for RC=0.1±0.05sec) and open-circuiting for 5.5 minutes at a room temperature of 15 to 35℃.							
	Rated voltage (Vdc)	6.3V	10V	16V	25V	35V	50V	
	Surge voltage (Vdc)	7.2V	12V	18V	29V	40V	57V	
	Appearance	No significant damage						
	Capacitance change	≦ ±20% of the initial value						
	D.F. (tan δ)	≦ 200% of the initial specified value						
	Leakage current	≦ The initial specified value						
	(Caution) Surge Voltage Test intends to evaluate capacitors in durability of an exceptional excessive voltage under specific conditions.It does not imply long-term use at all.							

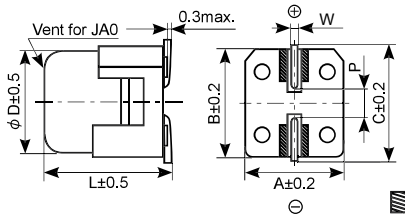
◆ DIMENSIONS [mm]

●Terminal Code : A
●Size code : F80 to JA0



Note : L±0.3 for F80

●Terminal Code : G(Vibration resistant structure)
●Size code : HA0 to JA0

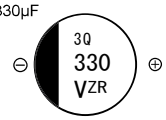


Size Code	D	L	A	B	C	W	P
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5

: Dummy terminals

◆ MARKING

EX) 35V330μF



●Rated voltage symbol

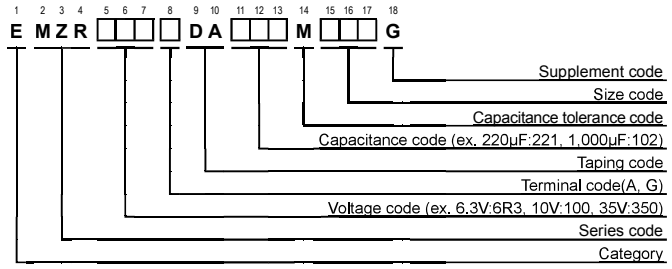
Rated voltage(Vdc)	6.3	10	16	25	35	50
Symbol	j	A	C	E	V	H

Applying voltage over the rated voltages causes the capacitors to have short lifetime.
Besides, applying voltage over the specified surge voltages may cause to have short circuit failure.
A protection circuit should be used if applied voltage will exceed the rated voltages.

Please contact us for mass production schedule.
Specifications in this bulletin are subject to change without notice.

Alchip™-MZR Series

◆ PART NUMBERING SYSTEM



◆ STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Size code	tan δ	ESR (Ωmax/20℃, 100kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
6.3	680	F80	0.26	0.16	600	EMZR6R3ADA681MF80G
	1,500	HA0	0.26	0.08	850	EMZR6R3□DA152MHA0G
	2,200	JA0	0.26	0.06	1,190	EMZR6R3□DA222MJA0G
10	470	F80	0.19	0.16	600	EMZR100ADA471MF80G
	1,000	HA0	0.19	0.08	850	EMZR100□DA102MHA0G
	1,500	JA0	0.19	0.06	1,190	EMZR100□DA152MJA0G
16	330	F80	0.16	0.16	600	EMZR160ADA331MF80G
	680	HA0	0.16	0.08	850	EMZR160□DA681MHA0G
	1,000	JA0	0.16	0.06	1,190	EMZR160□DA102MJA0G
25	220	F80	0.14	0.16	600	EMZR250ADA221MF80G
	470	HA0	0.14	0.08	850	EMZR250□DA471MHA0G
	820	JA0	0.14	0.06	1,190	EMZR250□DA821MJA0G
35	150	F80	0.12	0.16	600	EMZR350ADA151MF80G
	330	HA0	0.12	0.08	850	EMZR350□DA331MHA0G
	560	JA0	0.12	0.06	1,190	EMZR350□DA561MJA0G
50	220	HA0	0.10	0.18	670	EMZR500□DA221MHA0G
	330	JA0	0.10	0.12	900	EMZR500□DA331MJA0G

□ :Enter the appropriate terminal code.

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