

# Alchip™- MLK Series

- **⊚**6.1mm height
- Endurance: 5,000 hours at 105°C
- Rated voltage range: 6.3 to 35V
- O Nominal capacitance range: 4.7 to 100μF
- Suitable to fit for downsized equipment
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant

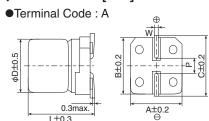




# **SPECIFICATIONS**

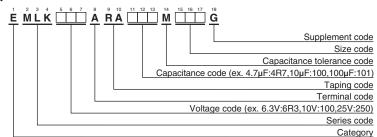
Items	Characteristics									
Category Temperature Range	-25 to +105℃									
Rated Voltage Range	6.3 to 35V <sub>d</sub>									
Capacitance Tolerance	±20%(M) (at 20℃,120Hz)									
Leakage Current	I=0.03CV or 4μA, whichever is greater Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C, after 2 minutes)									
Dissipation Factor	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V				
(tan δ)	tan δ (Max.)	0.32	0.28	0.26	0.16	0.14	(at 20℃,120Hz)			
Low Temperature	Rated voltage(Vdc)	6.3V	10V	16V	25V	35V				
Characteristics	Z(-10°C)/Z(+20°C)	4	3	2	2	2				
(Max. Impedance Ratio)	(at 120Hz)									
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 5,000 hours at 105℃.									
	Capacitance change	≦±3	30% of	the ini	tial valu	ie				
	D.F. (tan $\delta$ )	≦30	0% of t	he initi	al spec	ified va	alue			
	Leakage current	≦Th	e initial	specif	ied val	ıe				
Shelf Life The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them f							ors are restored to 20°C after exposing them for 1,000 hours at 105°C 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				ie				
	D.F. (tan $\delta$ )	≦300% of the initial specified value				ified va	alue			
	Leakage current	≦Th	e initial	specif	ied val	ue				

# **◆DIMENSIONS** [mm]



Size code	D	L	Α	В	С	W	Р
E61	5	5.8	5.3	5.3	5.9	0.5 to 0.8	1.4
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9

# **◆PART NUMBERING SYSTEM**



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

#### **◆**MARKING



# ■Rated voltage symbol

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Rated voltage (Vdc)	6.3	10	16	25	35			
Symbol	j	Α	С	Е	V			

# **STANDARD RATINGS**

WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mArms/ 105°C,120Hz)	Part No.
6.3	47	E61	0.32	36	EMLK6R3ARA470ME61G
0.3	100	F61	0.32	60	EMLK6R3ARA101MF61G
10	33	E61	0.28	35	EMLK100ARA330ME61G
16	22	E61	0.26	30	EMLK160ARA220ME61G
10	47	F61	0.26	50	EMLK160ARA470MF61G
25	33	F61	0.16	48	EMLK250ARA330MF61G
	4.7	E61	0.14	19	EMLK350ARA4R7ME61G
35	10	E61	0.14	25	EMLK350ARA100ME61G
	10	F61	0.14	30	EMLK350ARA100MF61G
	22	F61	0.14	42	EMLK350ARA220MF61G

#### **◆RATED RIPPLE CURRENT MULTIPLIERS**

### Frequency Multipliers

	•			
Frequency(Hz)	120	1k	10k	100k
6.3 to 35V <sub>dc</sub>	1.00	1.05	1.08	1.08

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.