

Alchip™-MHK Series

- Endurance : 2,000 hours at 125°C
- Specified ESR after endurance
- For automobile modules and other high temperature applications
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

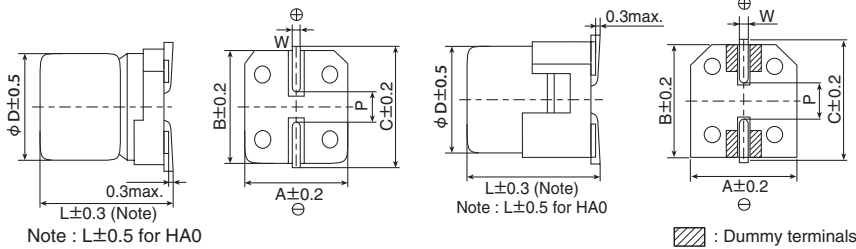


◆ SPECIFICATIONS

Items	Characteristics	
Category	-40 to +125°C	
Temperature Range	-40 to +125°C	
Rated Voltage Range	35V _{dc}	
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)	
Leakage Current	I=0.01CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minute)	
Dissipation Factor (tan δ)	Rated voltage(V _{dc})	35V
	tan δ (Max.)	0.14 (at 20°C, 120Hz)
Low Temperature Characteristics (Max. impedance Ratio)	Rated voltage(V _{dc})	35V
	Z(-25°C)/Z(+20°C)	2
	Z(-40°C)/Z(+20°C)	3 (at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 125°C.	
	Capacitance change	≤ ±30% of the initial value
	D.F. (tan δ)	≤300% of the initial specified value
	Leakage current	≤The initial specified value
	ESR(Ω max./-40°C, 400kHz)	F80 6.0 HA0 4.5
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°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
	D.F. (tan δ)	≤300% of the initial specified value
	Leakage current	≤The initial specified value

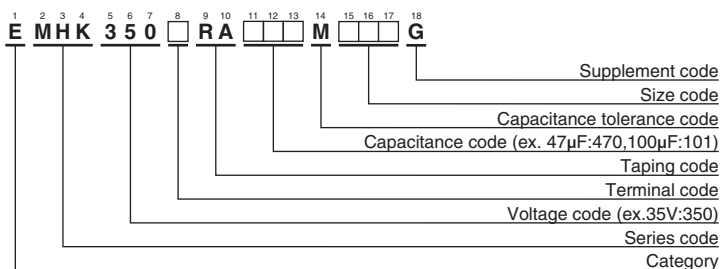
◆ DIMENSIONS [mm]

- Terminal Code : A
- Size code : F80, HA0
- Terminal Code : G(Vibration resistant structure)
- Size code : F80, HA0



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

◆ PART NUMBERING SYSTEM



◆ MARKING



- Rated voltage symbol

Rated voltage (V _{dc})	Symbol
35	V

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

Alchip™-**MHK** Series

◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size code	ESR (Ω max./100k to 400kHz)		Rated ripple current (mA rms/125°C, 100k to 400kHz)	Part No.
			20°C	-40°C		
35	47	F80	0.30	3.0	240	EMHK350□RA470MF80G
	100	F80	0.30	3.0	240	EMHK350□RA101MF80G
	220	HA0	0.20	2.0	330	EMHK350□RA221MHA0G

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF)	Frequency(Hz)			
	120	1k	10k	100k
47 to 100	0.40	0.75	0.90	1.00
220	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.