

Ripple Current Multipliers for AL-CHIP series

1. Ripple Current Frequency Multipliers:

1.1.1) MVA / MVS / MV / MVK / MKA / MVE / MVJ / MVL series (B55~J10 case sizes)

	Frequency (Hz)	120	300	1k	10k	100k
B55	0.1 ~ 22(μ F)	1	1.03	1.05	1.08	1.08
D46 ~ J10	0.1 ~ 1(μ F)	1	1.25	1.50	1.75	1.80
	1.5 ~ 10(μ F)	1	1.15	1.30	1.40	1.50
	15 ~ 1,000(μ F)	1	1.03	1.05	1.08	1.08

1.1.2) MVA / MVE series (K14~M22 case sizes)

Frequency (Hz)	120	1k	10k	100k
3.3 ~ 4.7(μ F)	1	1.75	2.25	2.50
10 ~ 68(μ F)	1	1.50	1.75	1.80
100 ~ 1,500(μ F)	1	1.30	1.40	1.50
2,200 ~ 10,000(μ F)	1	1.05	1.08	1.08

1.2.1) MVY / MVZ / MZA series (D55~J10 case sizes)

Frequency (Hz)	120	1k	10k	100k
1.0 ~ 8.2(μ F)	0.35	0.70	0.90	1.00
10 ~ 180(μ F)	0.40	0.75	0.90	1.00
220 ~ 560(μ F)	0.50	0.85	0.94	1.00
680 ~ 1,500(μ F)	0.60	0.87	0.95	1.00

1.2.2) MVY series (K14~M22 case sizes)

Frequency (Hz)	120	1k	10k	100k
47 ~ 100(μ F)	0.40	0.75	0.90	1.00
220 ~ 470(μ F)	0.50	0.85	0.94	1.00
680 ~ 1,000(μ F)	0.60	0.87	0.95	1.00
2,200 ~ 3,300(μ F)	0.75	0.90	0.95	1.00
4,700 ~ 8,200(μ F)	0.85	0.95	0.98	1.00

1.3.1) MVH series (F60~J10 case sizes)

Frequency (Hz)	120	1k	10k	100k
10(μ F)	0.66	0.86	0.93	1.00
22 ~ 330(μ F)	0.93	0.97	1.00	1.00

1.3.2) MVH series (K14~M22 case sizes)

(10~100V)

Frequency (Hz)	120	1k	10k	100k
47 ~ 100(μ F)	0.40	0.75	0.90	1.00
220 ~ 470(μ F)	0.50	0.85	0.94	1.00
680 ~ 1,000(μ F)	0.60	0.87	0.95	1.00
2,200 ~ 3,300(μ F)	0.75	0.90	0.95	1.00
4,700(μ F)	0.85	0.95	0.98	1.00

1.3.3) MVH series (K14~M22 case sizes)

(160~450V)

Frequency (Hz)	120	1k	10k	100k
3.3 ~ 33(μ F)	1.00	1.50	1.75	1.80
47 ~ 68(μ F)	1.00	1.30	1.40	1.50

2. Ripple Current Temperature Multipliers:

a) MVK / MKA / MVE / MVJ / MVL series:

Ambient Temperature (°C)	~85	105
Factor	1.30	1.00

b) MVY / MVZ / MZA series:

Ambient Temperature (°C)	~85	105
Factor	1.73	1.00

c) MVH series:

Ambient Temperature (°C)	~105	125
Factor	1.73	1.00

Note: For long life applications, do not apply ripple current exceeding the rated ripple current specified at rated maximum operating temperature, even the actual operating temperature is less than the rated maximum operating temperature. We cannot expect a life time extension using the temperature multipliers even at actually lower ambient temperature.