

Alchip® MVK Series

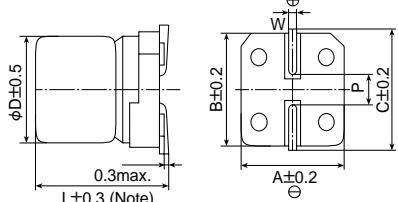
- Endurance : 105°C 1000 to 2000 hours
- Suitable to fit for downsized equipment
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)



◆SPECIFICATIONS

Items	Characteristics					
Category Temperature Range	-40 to +105°C					
Rated Voltage Range	6.3 to 50Vdc					
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 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°C after 2 minutes)					
Dissipation Factor (tanδ)	Rated voltage (Vdc)	6.3V	10V	16V	25V	35V
	tanδ (Max.)	D55 to F55	0.30	0.24	0.20	0.16
		H63 to J10	0.40	0.30	0.26	0.16
			0.14	0.12		
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	6.3V	10V	16V	25V	35V
	Z(-25°C)/Z(+20°C)	4	3	2	2	2
	Z(-40°C)/Z(+20°C)	10	8	6	4	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 the specified period of time at 105°C.					
	Case code	D55 to F55		H63 to J10		
	Time	1000hours		2000hours		
	Capacitance change	$\leq \pm 30\%$ of the initial value		$\leq \pm 20\%$ of the initial value		
	D.F. (tanδ)	$\leq 300\%$ of the initial specified value		$\leq 200\%$ of the initial specified value		
	Leakage current	\leq The initial specified value		\leq The initial specified value		
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for the specified time at 105°C without voltage applied.					
	Case code	D55 to F55		H63 to J10		
	Time	500hours		1000hours		
	Capacitance change	$\leq \pm 25\%$ of the initial value		$\leq \pm 20\%$ of the initial value		
	D.F. (tanδ)	$\leq 200\%$ of the initial specified value		$\leq 200\%$ of the initial specified value		
	Leakage current	\leq The initial specified value		\leq The initial specified value		

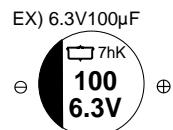
◆DIMENSIONS (Terminal Type=VC) [mm]



Note : L±0.5 for H63, H10 and J10

Case code	D	L	A	B	C	W	P
D55	4	5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55	5	5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55	6.3	5.2	6.6	6.6	7.2	0.5 to 0.8	1.9
H63	8	6.3	8.3	8.3	9.0	0.5 to 0.8	2.3
H10	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
J10	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5

◆MARKING



EX) 6.3V100μF

◆PART NUMBERING SYSTEM

MVK 50 VC R47 M D55

Case code
Cap tolerance ($\pm 20\%$)
Nominal cap code
Terminal type (VC)
Rated voltage in volts
Series name

Capacitance	Code
0.1μF	R1
0.47μF	R47
1.0μF	1
4.7μF	4R7
10μF	10
100μF	100
1000μF	1000

◆STANDARD RATINGS

μF	Vdc	6.3	10	16	25	35	50
0.1							D55 1.3
0.22							D55 2.6
0.33							D55 3.2
0.47							D55 3.8
1.0							D55 5.6
2.2							D55 10
3.3							D55 14
4.7							E55 19
10				D55 16		E55 25	F55 29
22		D55 21		E55 30		F55 40	H63 70
33			E55 34		F55 45	H63 80	H10 140
47		E55 36		F55 48	H63 80		H10 170
100		F55 56	H63 90		H10 180		J10 310
220			H10 180			J10 375	
330		H10 290			J10 450		
470				J10 460			
1000		J10 410					

Note : → Use next higher voltage part.