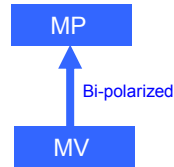


## MP Series

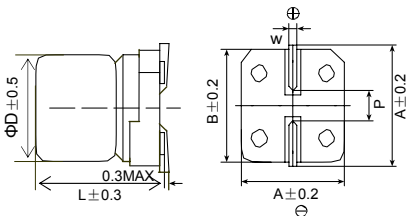
- Bi-polarized chip type for the circuit, of which polarity is frequently reversed
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant



### ◆ SPECIFICATIONS

Items	Characteristics								
Category	Temperature Range								
Temperature Range	-40 to +85 °C (4 to 50V <sub>dc</sub> )								
Rated Voltage Range	4 to 50V <sub>dc</sub>								
Capacitance Tolerance	±20% (at 20 °C, 120Hz)								
Leakage Current	V=4 to 63V <sub>dc</sub>				Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)				
	I=0.05CV or 10μA				(at 20 °C after 2 minutes)				
Dissipation Factor (tanδ)	Rated voltage (V <sub>dc</sub> )	4	6.3	10	16	25	35	50	(at 20 °C, 120Hz)
	tanδ (Max.)	0.45	0.32	0.26	0.24	0.22	0.20	0.20	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	4	6.3	10	16	25	35	50	(at 120Hz)
	Z(-25 °C)/Z(+20 °C)	7	4	3	2	2	2	2	
	Z(-40 °C)/Z(+20 °C)	15	10	8	6	4	3	3	
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 85 °C, however the polarization shall be reversed every 250 hours.								
	Capacitance change	≤±20% of the initial value							
	D.F. (tanδ)	≤200% of the initial specified							
	Leakage current	≤The initial specified value							
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20 °C after exposing them for 500 hours at 85 °C								
	Capacitance change	≤±20% of the initial value							
	D.F. (tanδ)	≤150% of the initial specified							
	Leakage current	≤The initial specified value							

### ◆ DIMENSIONS [mm]



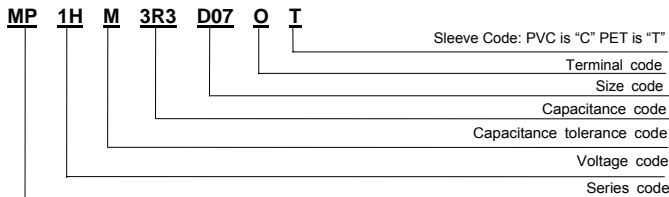
Size code	D	L	A	B	C	W	P
D55	4	5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55	5	5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55	6.3	5.2	6.6	6.6	7.2	0.5 to 0.8	1.9

### ◆ RMARKING

EX)35V4.7 F



### ◆ PART NUMBERING SYSTEM



※Sleeve Code and Terminal Code should follow the part number system

# MP Series

## ◆ STANDARD RATINGS

Vdc (V)	Cap (μF)	Size code	tanδ	Ripple current (mA <sub>rms</sub> /85 °C, 120Hz)
4(OG)	15	D55	0.45	14
6.3(OJ)	10	D55	0.32	13
	22	E55	0.32	23
	47	F55	0.32	36
10(1A)	6.8	D55	0.26	12
	15	E55	0.26	21
	33	F55	0.26	33
16(1C)	4.7	D55	0.24	11
	10	E55	0.24	18
	22	F55	0.24	28
25(1E)	3.3	D55	0.22	9.0
	6.8	E55	0.22	15
	15	F55	0.22	24
35(1V)	2.2	D55	0.20	8.0

Vdc (V)	Cap (μF)	Size code	tanδ	Ripple current (mA <sub>rms</sub> /85 °C, 120Hz)
35(1V)	4.7	E55	0.20	13
	6.8	F55	0.20	17
	10	F55	0.20	21
50(1H)	0.10	D55	0.20	1.3
	0.15	D55	0.20	1.9
	0.22	D55	0.20	2.3
	0.33	D55	0.20	2.8
	0.47	D55	0.20	3.4
	0.68	D55	0.20	4.1
	1.0	D55	0.20	5.5
	1.5	D55	0.20	6.5
	2.2	E55	0.20	9.0
	3.3	E55	0.20	11
	4.7	F55	0.20	14