

MVG(MV)-BP Series

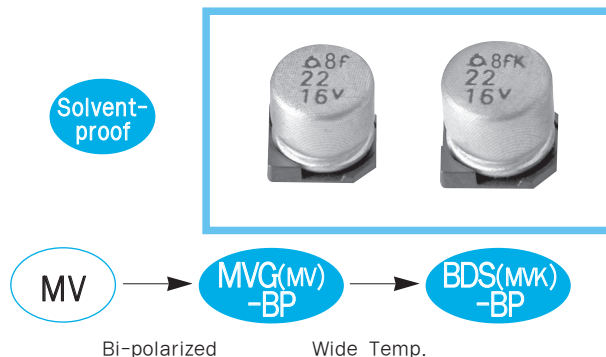
• 85°C 2,000Hrs assured.

- Vertical SMD type.
- Bi-polarized.
- For LED MT / TV.
- RoHS compliant.
- Halogen-free capacitors are also available.

BDS(MVK)-BP Series

• 105°C 1,000Hrs assured.

- Vertical SMD type.
- Bi-polarized.
- Wide Temperature Range.
- For LED MT / TV.
- RoHS compliant.
- Halogen-free capacitors are also available.

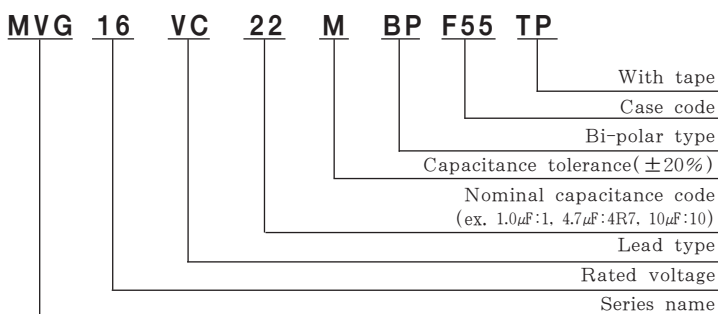


SPECIFICATIONS

Item	Characteristics																										
	MVG(MV)-BP	BDS(MVK)-BP																									
Series Name	MVG(MV)-BP	BDS(MVK)-BP																									
Rated Voltage Range	4 ~ 50 V _{DC}	6.3 ~ 50 V _{DC}																									
Operating Temperature Range	-40 ~ +85°C	-40 ~ +105°C																									
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)																										
Leakage Current (In both directions)	I = 0.05CV(μA) or 10μA, whichever is greater. Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V _{DC}) (at 20°C, after 2 minutes)																										
Dissipation Factor(Tanδ)	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Rated Voltage(V_{DC})</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35~50</td> </tr> <tr> <td>MV-BP</td> <td>0.45</td> <td>0.32</td> <td>0.26</td> <td>0.24</td> <td>0.22</td> <td>0.20</td> </tr> <tr> <td>MVK-BP</td> <td>-</td> <td>0.35</td> <td>0.26</td> <td>0.24</td> <td>0.20</td> <td>0.18</td> </tr> </table>						Rated Voltage(V _{DC})	4	6.3	10	16	25	35~50	MV-BP	0.45	0.32	0.26	0.24	0.22	0.20	MVK-BP	-	0.35	0.26	0.24	0.20	0.18
	Rated Voltage(V _{DC})	4	6.3	10	16	25	35~50																				
	MV-BP	0.45	0.32	0.26	0.24	0.22	0.20																				
MVK-BP	-	0.35	0.26	0.24	0.20	0.18																					
(at 20°C, 120Hz)																											
Temperature Characteristics (Max. Impedance ratio)	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Rated Voltage(V_{DC})</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35~50</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>15</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> </tr> </table>						Rated Voltage(V _{DC})	4	6.3	10	16	25	35~50	Z(-25°C)/Z(20°C)	7	4	3	2	2	2	Z(-40°C)/Z(20°C)	15	10	8	6	4	3
	Rated Voltage(V _{DC})	4	6.3	10	16	25	35~50																				
	Z(-25°C)/Z(20°C)	7	4	3	2	2	2																				
Z(-40°C)/Z(20°C)	15	10	8	6	4	3																					
(at 120Hz)																											
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied with the following conditions with its polarization reversed every 250 hours.																										
	Series Name	MVG(MV)-BP			BDS(MVK)-BP																						
	Test time & temperature	2,000 hours at 85°C			1,000 hours at 105°C																						
	Capacitance change	≤ ±20% of the initial value			≤ ±30% of the initial value																						
	Tanδ	≤200% of the initial specified value			≤300% of the initial specified value																						
Leakage current	≤The initial specified value			≤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 (MVG(MV)-BP) or 105°C (BDS(MVK)-BP) without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.																										
	Series Name	MVG(MV)-BP			BDS(MVK)-BP																						
	Capacitance change	≤ ±15% of the initial value			≤ ±25% of the initial value																						
	Tanδ	≤150% of the initial specified value			≤200% of the initial specified value																						
	Leakage current	≤The initial specified value			≤The initial specified value																						
Others	Satisfied characteristics KS C IEC 60384-4																										

MVG(MV)-BP / BDS(MVK)-BP Series

PART NUMBERING SYSTEM



DIMENSIONS OF MVG(MV)-BP, BDS(MVK)-BP Series

Unit(mm)

DIMENSIONS

MARKING

Recommended solder land on PC board

■ : Solder land on PC board

Note 1 : 6.3WV is marked by 6V.

Case code	∅D	L	A	B	C	W	P	a	b	c
D55	4	5.2	4.3	4.3	5.1	0.5~0.8	1.0	1.0	2.6	1.6
E55	5	5.2	5.3	5.3	5.9	0.5~0.8	1.4	1.4	3.0	1.6
F55	6.3	5.2	6.6	6.6	7.2	0.5~0.8	1.9	1.9	3.5	1.6
F60	6.3	5.7	6.6	6.6	7.2	0.5~0.8	1.9	1.9	3.5	1.6

RATINGS OF MVG(MV)-BP, BDS(MVK)-BP Series

MVG(MV)-BP

μF \ V _{DC}	4		6.3		10		16		25		35		50	
	1.0 (1.5)													
2.2											D55 8			E55 9
3.3								D55 9						E55 11
4.7 (6.8)						D55 11					E55 13			F55 14
10			D55 13			E55 18					F55 17			
(15)	D55 14				E55 21			F55 24						
22			E55 23			F55 28								
33					F55 33									
47			F55 36											

↑ Rated Ripple Current(mArms/ 85°C, 120Hz)
 ↑ Case code

BDS(MVK)-BP

μF \ V _{DC}	6.3		10		16		25		35		50	
	1.0 (1.5)											
2.2									D55 7			E55 9.0
3.3							D55 8					E55 12
4.7 (6.8)					D55 10				E55 14			F60 16 F60 20
10	D55 12				E55 18				F60 23			
(15)			E55 20				F60 28					
22	E55 23				F60 32							
33			F60 35									
47	F60 39											

↑ Rated Ripple Current (mArms/105°C, 120Hz)
 ↑ Case code

Note : → Use next higher voltage part.
 Parenthesized capacitance is not standard part.