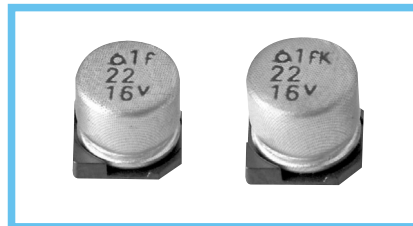


MVG(MV)-BP Series

• 85°C 2,000Hrs assured.

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

Solvent-proof



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.

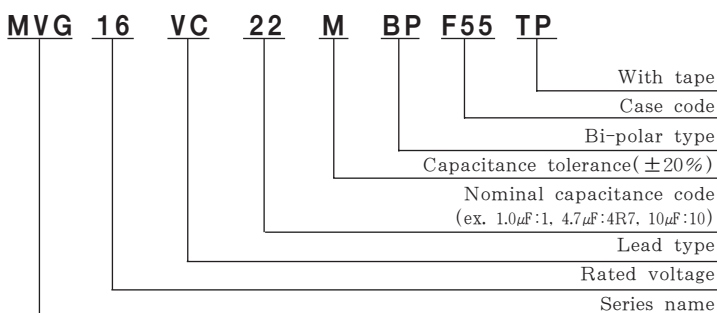


SPECIFICATIONS

Item	Characteristics																						
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;"> <thead> <tr> <th>Rated Voltage(V_{DC})</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35~50</th> </tr> </thead> <tbody> <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> </tbody> </table> <p style="text-align: right;">(at 20°C, 120Hz)</p>		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
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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																	
Temperature Characteristics (Max. Impedance ratio)	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Rated Voltage(V_{DC})</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35~50</th> </tr> </thead> <tbody> <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> </tbody> </table> <p style="text-align: right;">(at 120Hz)</p>		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
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Z(-40°C)/Z(20°C)	15	10	8	6	4	3																	
Load Life	<p>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.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Series Name</th> <th>MVG(MV)-BP</th> <th>BDS(MVK)-BP</th> </tr> </thead> <tbody> <tr> <td>Test time & temperature</td> <td>2,000 hours at 85°C</td> <td>1,000 hours at 105°C</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> <td>≤ ±30% of the initial value</td> </tr> <tr> <td>Tanδ</td> <td>≤200% of the initial specified value</td> <td>≤300% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤The initial specified value</td> <td>≤The initial specified value</td> </tr> </tbody> </table>		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						
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Leakage current	≤The initial specified value	≤The initial specified value																					
Shelf Life	<p>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.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Series Name</th> <th>MVG(MV)-BP</th> <th>BDS(MVK)-BP</th> </tr> </thead> <tbody> <tr> <td>Capacitance change</td> <td>≤ ±15% of the initial value</td> <td>≤ ±25% of the initial value</td> </tr> <tr> <td>Tanδ</td> <td>≤150% of the initial specified value</td> <td>≤200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤The initial specified value</td> <td>≤The initial specified value</td> </tr> </tbody> </table>		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									
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Others	Satisfied characteristics KS C IEC 60384-4																						

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

PART NUMBERING SYSTEM





SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

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							D55 5.5
(1.5)							D55 6.5
2.2						D55 8	E55 9
3.3					D55 9		E55 11
4.7				D55 11		E55 13	F55 14
(6.8)			D55 12		E55 15	F55 17	
10		D55 13		E55 18		F55 21	
(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						D55 5.3
(1.5)						D55 7.2
2.2					D55 7	E55 9.0
3.3				D55 8		E55 12
4.7			D55 10		E55 14	F60 16
(6.8)		D55 11		E55 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 (mA_{rms}/105°C, 120Hz)
 ↑ Case code

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

