

MVG(MV)-BP Series

• 85°C 2,000Hrs assured.

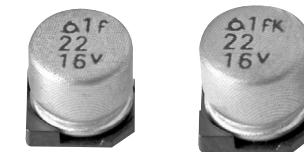
- Vertical SMD type.
- Bi-polarized.
- For LED MT / TV.
- RoHS compliant.
- Halogen-free capacitors are also available.

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.

Solvent-proof



MV

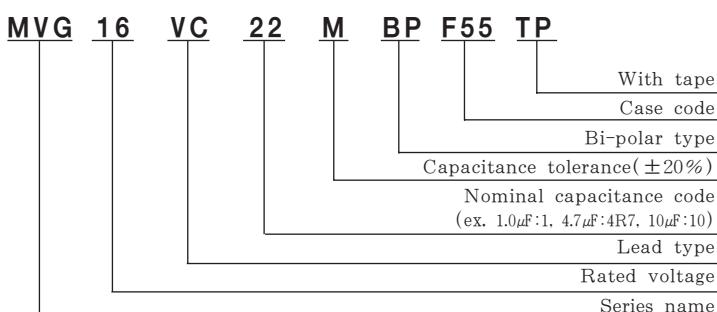
MVG(MV)
-BPBDS(MVK)
-BP

Bi-polarized

Wide Temp.

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	$\pm 20\%$ (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)	Rated Voltage(V _{DC})	4	6.3	10	16	25		
	MV-BP	0.45	0.32	0.26	0.24	0.22		
	MVK-BP	-	0.35	0.26	0.24	0.20		
	(at 20°C, 120Hz)							
Temperature Characteristics (Max. Impedance ratio)	Rated Voltage(V _{DC})	4	6.3	10	16	25		
	Z(-25°C)/Z(20°C)	7	4	3	2	2		
	Z(-40°C)/Z(20°C)	15	10	8	6	4		
	(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	$\leq \pm 20\%$ of the initial value			$\leq \pm 30\%$ of the initial value			
	Tanδ	$\leq 200\%$ of the initial specified value			$\leq 300\%$ 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 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	$\leq \pm 15\%$ of the initial value			$\leq \pm 25\%$ of the initial value			
	Tanδ	$\leq 150\%$ of the initial specified value			$\leq 200\%$ of the initial specified value			
	Leakage current	\leq The initial specified value			\leq The initial specified value			
Others	Satisfied characteristics KS C IEC 60384-4							

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		<small>Note 1 : 6.3WV is marked by 6V.</small>								
Case code	Ø 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	Vdc	4	6.3	10	16	25	35	50
1.0 (1.5)								D55 5.5
2.2								D55 6.5
3.3						D55 9		
4.7 (6.8)				D55 12	D55 11	E55 15	E55 13	E55 11
10 (15)	D55 14	D55 13		E55 21	E55 18	F55 24	F55 21	F55 17
22		E55 23			F55 28			
33			E55 23	F55 33				
47			F55 36					

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

BDS(MVK)-BP

μF	Vdc	6.3	10	16	25	35	50
1.0 (1.5)							D55 5.3
2.2							D55 7.2
3.3					D55 8		E55 9.0
4.7 (6.8)			D55 11	D55 10	E55 16		E55 12
10 (15)	D55 12		E55 20	E55 18	F60 28	F60 23	F60 16
22	E55 23			F60 32			F60 20
33			F60 35				
47	F60 39						

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

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