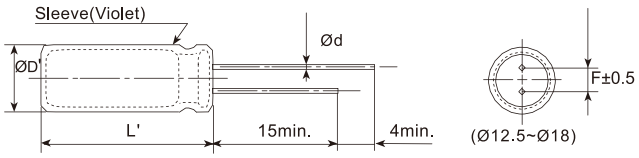
BG series

- SRS car assembly, high capacitance
- Low impedance, low temperature characteristics
- Endurance: +105°C 5,000 hours
- **RoHS Compliant**

SPECIFICATIONS

Items	Characteristics			
Category Temperature Range	-55~+105°C			
Rated Voltage Range	25 and 35 Vdc			
Capacitance Tolerance	±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)	25	35	
	tanδ (max.)	0.20	0.16	
	When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase.			(at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage (Vdc)	25	35	
	Z(-55°C)/Z(+20°C)	3	3	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 5,000 hours at 105°C.			
	Capacitance Change	≤±20% of the initial value		
	D.F. (tanδ)	≤200% of the initial specified value		
	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 1,000 hours at 105°C without voltage applied.			
	Capacitance Change	≤±20% of the initial value		
	D.F. (tanδ)	≤200% of the initial specified value		
	Leakage Current	≤200% of the initial specified value		

DIMENSIONS [mm]



ØD	12.5	14.5	16	18
Ød	0.6	0.8	0.8	0.8
F	5.0	7.5	7.5	7.5
ØD'	ØD+0.5max.			
L'	L+2.0max.			

PART NUMBERING SYSTEM

E BG 1E M 422 L25 O- - T

- T: Sleeve Code: "C" for PVC, "T" for PET
- O- -: Terminal code
- L25: Size code
- 422: Capacitance code
- M: Capacitance tolerance code
- 1E: Voltage code
- BG: Series code
- E: Category code

RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Freq.(Hz) / Cap.(μF)	120	1k	10k	100k
Cap.<2100	0.60	0.87	0.95	1.00
2100 Cap.<4000	0.75	0.90	0.95	1.00
Cap. 4000	0.85	0.95	0.98	1.00

The endurance of capacitors is shortened with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use,the rms ripple current has to be reduced.

Radial Type

BG series

STANDARD RATINGS

WV (Vdc)	Cap (μF)	Size DxL(mm)	tanδ	Impedance (Ωmax/20°C,100kHz)	Rated ripple current (mArms/105°C,100kHz)	Part Number
25(1E)	1700	12.5×20	0.20	0.057	1700	EBG1EM172W20OT
	2400	12.5×25	0.22	0.045	2000	EBG1EM242W25OT
		14.5×20	0.22	0.051	2000	EBG1EM242X20OT
	2800	12.5×30	0.22	0.039	2300	EBG1EM282W30OT
	3000	16×20	0.24	0.044	2250	EBG1EM302L20OT
	3400	14.5×25	0.24	0.041	2400	EBG1EM342X25OT
	3500	12.5×35	0.24	0.033	2700	EBG1EM352W35OT
	4200	16×25	0.26	0.033	2600	EBG1EM422L25OT
		18×20	0.26	0.042	2500	EBG1EM422M20OT
	4500	12.5×40	0.26	0.027	3100	EBG1EM452W40OT
	4600	14.5×30	0.26	0.032	2700	EBG1EM462X30OT
	5400	14.5×35	0.28	0.028	3100	EBG1EM542X35OT
	5600	16×30	0.28	0.026	3200	EBG1EM562L30OT
	6000	18×25	0.30	0.030	2800	EBG1EM602M25OT
	6400	14.5×40	0.30	0.025	3400	EBG1EM642X40OT
	6600	16×35	0.30	0.023	3500	EBG1EM662L35OT
	7800	16×40	0.32	0.021	3800	EBG1EM782L40OT
	7900	18×30	0.32	0.024	3500	EBG1EM792M30OT
	9200	18×35	0.36	0.022	3700	EBG1EM922M35OT
	11000	18×40	0.38	0.020	4000	EBG1EM113M40OT
35(1V)	1000	12.5×20	0.16	0.057	1700	EBG1VM102W20OT
	1400	12.5×25	0.16	0.045	2000	EBG1VM142W25OT
		14.5×20	0.16	0.051	2000	EBG1VM142X20OT
	1600	12.5×30	0.16	0.039	2300	EBG1VM162W30OT
	1800	16×20	0.16	0.044	2250	EBG1VM182L20OT
	2000	14.5×25	0.18	0.041	2400	EBG1VM202X25OT
	2100	12.5×35	0.18	0.033	2700	EBG1VM212W35OT
	2500	16×25	0.18	0.033	2600	EBG1VM252L25OT
		18×20	0.18	0.042	2500	EBG1VM252M20OT
	2700	12.5×40	0.18	0.027	3100	EBG1VM272W40OT
	2800	14.5×30	0.18	0.032	2700	EBG1VM282X30OT
	3200	14.5×35	0.20	0.028	3100	EBG1VM322X35OT
	3400	16×30	0.20	0.026	3200	EBG1VM342L30OT
	3600	18×25	0.20	0.030	2800	EBG1VM362M25OT
	3800	14.5×40	0.20	0.025	3400	EBG1VM382X40OT
	4000	16×35	0.22	0.023	3500	EBG1VM402L35OT
	4700	16×40	0.22	0.021	3800	EBG1VM472L40OT
	4800	18×30	0.22	0.024	3500	EBG1VM482M30OT
	5600	18×35	0.24	0.022	3700	EBG1VM562M35OT
	6700	18×40	0.24	0.020	4000	EBG1VM672M40OT