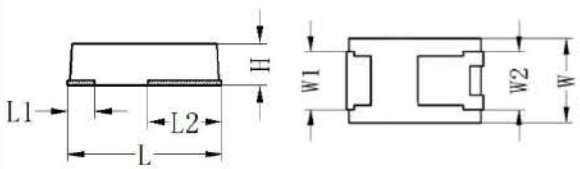
BNB series

- **Low ESR / Low ESL　低 ESR / 低 ESL**
- **Load life of 2000 hours at 105℃ 直流负荷寿命 105℃-2000 小时**
- **RoHS 2.0 Compliant　符合 RoHS2.0 规范**
- **MSL 3　湿敏 3 级**

Specifications 系列参数

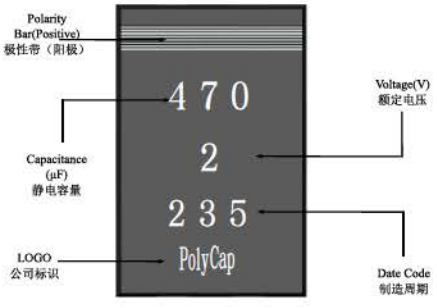
Items　项目	Characteristics　特性			
Operating Temp. Range　工作温度范围	-55℃ ~ +105℃			
Capacitance Range　容量范围	47 ~ 560μF			
Capacitance Tolerance　容量偏差	M：±20%			
Rated Voltage Range　额定电压范围	2V　~ 10V DC			
Dissipation Factor　损耗角正切	≤0.06(120Hz,20℃)			
Leakage Current　漏电流	I ≤0.1CV(μA) (after 2 minutes) (2V.DC ~ 6.3V.DC); I ≤0.3CV(μA) (after 2 minutes) (>6.3V.DC)			
Surge Voltage　浪涌电压	Rated working voltage × 1.25 (15℃~35℃)　额定电压的 1.25 倍（恒定温度 15℃~35℃）			
Endurance 105℃ · 2000h · at rated voltage 寿命： 105℃加载额定电压连续工作 2000 小时	Capacitance Change　容量变化	Within ±20% of the initial value　初始值±20%以内		
	Dissipation Factor　损耗角正切	≤ 2 times of the initial limit　不超初始规格值的 200%		
	Leakage current　漏电流	≤ 3 times of the initial limit　不超初始规格值的 300%		
Humidity Resistance 60℃ · 90 ~ 95% RH · 500h · at rated voltage 耐湿性 60℃ · 90 ~ 95%RH 加载额定电压连续工作 500 小时	Capacitance Change　容量变化	2.0V~2.5V	4V, 10V	6.3V
		+70%，-20%	+60%，-20%	+50%，-20%
	Dissipation Factor　损耗角正切	≤ 2 times of the initial limit　不超初始规格值的 200%		
	Leakage Current　漏电流	Within the initial limit　不超初始规格值　（2.0 V to 6.3 V） ≤ 3 times of the initial limit　不超初始规格值的 300%　（10 V）		

Dimensions 尺寸(Unit单位:mm)



Size Code 尺寸代码	L	W	H	W1/W2	L1/L2
V	7.3±0.3	4.3±0.3	1.9±0.3	2.4±0.3	1.3/3.4±0.3

Dimensions 尺寸(Unit单位:mm)



Date Code　制造周期说明：
"2"：Last digit of Christian year　公历年最后一位
"35"：week　周代码

Characteristics List 规格特性表

W.V. 工作电压 (V)	Capacitance 容量 (μF)	Size 尺寸(mm)			ESR 等效串联电阻 (100kHz / +20℃) (mΩ)	Rated Ripple Current 额定纹波电流 (100 kHz / +45 ℃) (mA,r.m.s)	Part Number* 物料编码*
		L	W	H			
2	180	7.3	4.3	1.9	15	5100	BNB181M002V00TB0015
		7.3	4.3	1.9	12	5600	BNB181M002V00TB0012
		7.3	4.3	1.9	9	6300	BNB181M002V00TB0009
	220	7.3	4.3	1.9	15	5100	BNB221M002V00TB0015
		7.3	4.3	1.9	12	5600	BNB221M002V00TB0012
		7.3	4.3	1.9	9	6300	BNB221M002V00TB0009
	270	7.3	4.3	1.9	15	5100	BNB271M002V00TB0015
		7.3	4.3	1.9	12	5600	BNB271M002V00TB0012
		7.3	4.3	1.9	9	6300	BNB271M002V00TB0009
		7.3	4.3	1.9	6	7500	BNB271M002V00TB0006
		7.3	4.3	1.9	4.5	8500	BNB271M002V00TB04R5
	330	7.3	4.3	1.9	15	5100	BNB331M002V00TB0015
		7.3	4.3	1.9	12	5600	BNB331M002V00TB0012
		7.3	4.3	1.9	9	6300	BNB331M002V00TB0009
		7.3	4.3	1.9	6	7500	BNB331M002V00TB0006
		7.3	4.3	1.9	4.5	8500	BNB331M002V00TB04R5
		7.3	4.3	1.9	3	10200	BNB331M002V00TB0003
	390	7.3	4.3	1.9	15	5100	BNB391M002V00TB0015
		7.3	4.3	1.9	12	5600	BNB391M002V00TB0012
		7.3	4.3	1.9	9	6300	BNB391M002V00TB0009
		7.3	4.3	1.9	6	7500	BNB391M002V00TB0006
		7.3	4.3	1.9	4.5	8500	BNB391M002V00TB04R5
		7.3	4.3	1.9	3	10200	BNB391M002V00TB0003
	470	7.3	4.3	1.9	15	5100	BNB471M002V00TB0015
		7.3	4.3	1.9	12	5600	BNB471M002V00TB0012
		7.3	4.3	1.9	9	6300	BNB471M002V00TB0009
		7.3	4.3	1.9	6	7500	BNB471M002V00TB0006
		7.3	4.3	1.9	4.5	8500	BNB471M002V00TB04R5
		7.3	4.3	1.9	3	10200	BNB471M002V00TB0003
	560	7.3	4.3	1.9	15	5100	BNB561M002V00TB0015
		7.3	4.3	1.9	12	5600	BNB561M002V00TB0012
		7.3	4.3	1.9	9	6300	BNB561M002V00TB0009
		7.3	4.3	1.9	6	7500	BNB561M002V00TB0006
		7.3	4.3	1.9	4.5	8500	BNB561M002V00TB04R5
		7.3	4.3	1.9	3	10200	BNB561M002V00TB0003
2.5	150	7.3	4.3	1.9	9	6300	BNB151M2R5V00TB0009
	180	7.3	4.3	1.9	9	6300	BNB181M2R5V00TB0009
	220	7.3	4.3	1.9	15	5100	BNB221M2R5V00TB0015
		7.3	4.3	1.9	9	6300	BNB221M2R5V00TB0009
		7.3	4.3	1.9	7	7000	BNB221M2R5V00TB0007
	330	7.3	4.3	1.9	15	5100	BNB331M2R5V00TB0015
		7.3	4.3	1.9	9	6300	BNB331M2R5V00TB0009
		7.3	4.3	1.9	6	7500	BNB331M2R5V00TB0006
		7.3	4.3	1.9	4.5	8500	BNB331M2R5V00TB04R5
		7.3	4.3	1.9	3	10200	BNB331M2R5V00TB0003
	390	7.3	4.3	1.9	15	5100	BNB391M2R5V00TB0015
		7.3	4.3	1.9	9	6300	BNB391M2R5V00TB0009
		7.3	4.3	1.9	6	7500	BNB391M2R5V00TB0006

W.V. 工作电压 (V)	Capacitance 容量 (μF)	Size 尺寸(mm)			ESR 等效串联电阻 (100kHz / +20℃) (mΩ)	Rated Ripple Current 额定纹波电流 (100 kHz / +45 ℃) (mA,r.m.s)	Part Number* 物料编码*
		L	W	H			
2.5	390	7.3	4.3	1.9	4.5	8500	BNB391M2R5V00TB04R5
		7.3	4.3	1.9	3	10200	BNB391M2R5V00TB0003
	470	7.3	4.3	1.9	15	5100	BNB471M2R5V00TB0015
		7.3	4.3	1.9	9	6300	BNB471M2R5V00TB0009
		7.3	4.3	1.9	6	7500	BNB471M2R5V00TB0006
		7.3	4.3	1.9	4.5	8500	BNB471M2R5V00TB04R5
		7.3	4.3	1.9	3	10200	BNB471M2R5V00TB0003
4	82	7.3	4.3	1.9	9	6300	BNB820M004V00TB0009
	100	7.3	4.3	1.9	9	6300	BNB101M004V00TB0009
	150	7.3	4.3	1.9	15	5100	BNB151M004V00TB0015
		7.3	4.3	1.9	9	6300	BNB151M004V00TB0009
		7.3	4.3	1.9	7	7000	BNB151M004V00TB0007
	180	7.3	4.3	1.9	15	7000	BNB181M004V00TB0015
		7.3	4.3	1.9	12	5100	BNB181M004V00TB0012
		7.3	4.3	1.9	9	5600	BNB181M004V00TB0009
	220	7.3	4.3	1.9	15	6300	BNB221M004V00TB0015
		7.3	4.3	1.9	12	5100	BNB221M004V00TB0012
		7.3	4.3	1.9	9	5600	BNB221M004V00TB0009
	270	7.3	4.3	1.9	15	6300	BNB271M004V00TB0015
		7.3	4.3	1.9	9	5100	BNB271M004V00TB0009
	330	7.3	4.3	1.9	15	6300	BNB331M004V00TB0015
		7.3	4.3	1.9	9	5100	BNB331M004V00TB0009
		7.3	4.3	1.9	6	7500	BNB331M004V00TB0006
6.3	100	7.3	4.3	1.9	15	5100	BNB101M6R3V00TB0015
	120	7.3	4.3	1.9	15	5100	BNB121M6R3V00TB0015
		7.3	4.3	1.9	9	6300	BNB121M6R3V00TB0009
	150	7.3	4.3	1.9	15	5100	BNB151M6R3V00TB0015
		7.3	4.3	1.9	12	5600	BNB151M6R3V00TB0012
		7.3	4.3	1.9	9	6300	BNB151M6R3V00TB0009
	180	7.3	4.3	1.9	15	5100	BNB181M6R3V00TB0015
		7.3	4.3	1.9	9	6300	BNB181M6R3V00TB0009
	220	7.3	4.3	1.9	15	5100	BNB221M6R3V00TB0015
		7.3	4.3	1.9	9	6300	BNB221M6R3V00TB0009
10	47	7.3	4.3	1.9	28	3800	BNB470M010V00TB0028
		7.3	4.3	1.9	18	4700	BNB470M010V00TB0018
	68	7.3	4.3	1.9	28	4000	BNB680M010V00TB0028
		7.3	4.3	1.9	18	4700	BNB680M010V00TB0018
		7.3	4.3	1.9	15	5100	BNB680M010V00TB0015
	100	7.3	4.3	1.9	25	4000	BNB101M010V00TB0025
		7.3	4.3	1.9	15	5100	BNB101M010V00TB0015
		7.3	4.3	1.9	9	6300	BNB101M010V00TB0009
	120	7.3	4.3	1.9	25	4000	BNB121M010V00TB0025
		7.3	4.3	1.9	15	5100	BNB121M010V00TB0015
		7.3	4.3	1.9	9	6300	BNB121M010V00TB0009
	150	7.3	4.3	1.9	25	4000	BNB151M010V00TB0025
		7.3	4.3	1.9	15	5100	BNB151M010V00TB0015
		7.3	4.3	1.9	9	6300	BNB151M010V00TB0009

* Default tin plated terminals and 13 inch reels in Part Numbers 物料编码中默认镀锡端子和 13 英寸卷盘

Temperature Compensation Coefficient for Ripple Current 纹波电流温度系数

Temperature 温度	T≤45℃	45℃<T≤85℃	85℃<T≤105℃
Coefficient 系数 (2.0V ~ 6.3V)	1.00	0.70	0.25
Coefficient 系数 (10V)	1.00	0.80	0.50