

**PR**

High reliability  
低阻抗高可靠品

- High reliability, Low ESR, High ripple current.  
高可靠、低阻抗、高纹波。
- Load life of 3000 hours at 125°C.  
125°C 负荷寿命 3000 小时。
- lead free flow soldering condition correspondence.  
适用于无铅波峰焊。



### ■ Specifications 特性表

Items 项目	Condition 测试条件	Characteristics 主要特性		
Rated Voltage Range 额定工作电压范围(V)	---	16 ~ 50V <sub>dc</sub>		
Category Temperature Range 使用温度范围(°C)	---	-55 ~ +125°C		
Capacitance Tolerance 静电容量允许偏差(%)	120Hz/20°C	±20% (M), at 20°C, 120Hz		
Dissipation Factor (Tanδ, DF) 损耗角正切值(%)	120Hz/20°C	Please see the attached characteristics list.		
Leakage Current (※1) 漏电流	Rated Voltage applied, after 2 minutes 施加额定电压 2 分钟后	Please see the attached characteristics list.		
Equivalent series resistance (ESR) 等效串联电阻 (※2)	100KHz to 300KHz/20°C	Please see the attached characteristics list.		
Temperature Characteristics (Max. Impedance Ratio) 高低温特性阻抗比	Based the value at 100KHz, +20°C 基于 20°C, 100KHz 值	-55°C +105°C	Z/Z20°C Z/Z105°C	Less than 1.25 Less than 1.25
Endurance 耐久性	125°C, 3000h, Rated Voltage applied 施加额定电压	△C/C(※3)	Within ±20% of the initial capacitance value	
		DF	150% or less than the initial specified value	
		ESR	150% or less than the initial specified value	
		LC	less than or equal to the initial specified value	
Damp Heat (Steady State) 高温高湿	60°C, 90 to 95%RH, 1000h, No- applied Voltage 不施加电压	△C/C	Within ±20% of the initial capacitance value	
		DF	150% or less than the initial specified value	
		ESR	150% or less than the initial specified value	
		LC	less than or equal to the initial specified value	
Resistance to Soldering Heat 耐焊接热	Flow method 波峰焊 (260±5°C, 10S)	△C/C	Within ±10% of the initial capacitance value(※3)	
		DF	130% or less than the initial specified value	
		ESR	130% or less than the initial specified value	
		LC	less than or equal to the initial specified value	

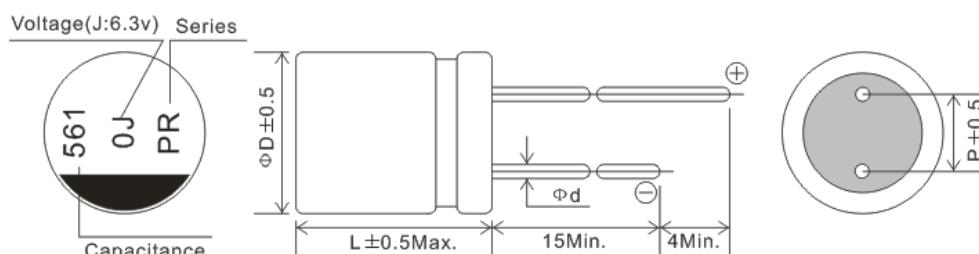
※1 If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

如果有任何疑问，可以在 105°C 温度下对产品施加额定电压 120 分钟后测试。

※2 ESR should be measured at both of the terminal ends closest where the terminals protrude through the plastic platform. 在 ESR 测试时，请使测试点尽可能地靠近引线弯曲处

※3 Initial value: The value before test of examination of resistance to soldering. 初始值：实验投入或焊接前的值

### ■ Drawing(Unit: mm) 外形图



Size	8x9	8x12	10x13
ØD	8.0	8.0	10.0
L	8.5	11.5	12.5
P	3.5	3.5	5.0
Ød	0.6	0.6	0.6

### ■ Rated ripple current multipliers(Unit: mm) 额定纹波修正系数

Frequency 频率 (Hz)	120Hz≤f<1KHz	1KHz≤f<10KHz	10KHz≤f<100KHz	100KHz≤f<300K
Coefficient 系数	0.05	0.3	0.7	1.00

**Note:** All design and specifications are for reference only and is subject to change without prior notice. If any doubt about safety for your application, Please contact us immediately for technical assistance before purchase.

**注:** 以上所提供的设计及特性参数仅供参考，任何修改不作预先通知，如有使用上任何疑问，请在采购前与我们联系，以便提供技术上的协助。

# PR Series

## ■ Standard ratings 标准品一览表

Rated voltage 额定电压 (V)(code)	Surge Voltage 浪涌电压 (V)	Rated Cpacitance 额定容量 (μF)	Case Size 产品尺寸 ΦD x L(mm)	DF 损失角正切值 (DF,max)	Leakage Current 漏电流 (mA,max)	ESR(mΩ) (at 100kHz 20°C)	Rated Ripple 纹波电流 (mA,rms,at 105°C)
16 (1C)	18.4	150	8x9	0.12	480	26	2100
		220	8x12	0.12	704	25	2400
		390	10x13	0.12	1248	23	2900
20 (1D)	23	120	8x9	0.12	480	27	2000
		150	8x12	0.12	600	26	2300
		270	10x13	0.12	1080	24	2800
25 (1E)	28.7	82	8x9	0.12	410	28	2000
		120	8x12	0.12	600	27	2300
		180	10x13	0.12	900	25	2800
35 (1V)	40.2	39	8x9	0.12	273	33	1800
		56	8x12	0.12	392	31	2100
		100	10x13	0.12	700	28	2700
50 (1H)	57.5	22	8x9	0.12	220	35	1800
		27	8x12	0.12	270	33	2000
		47	10x13	0.12	470	29	2600

Note1: Case size ΦD x L(mm), ripple current (mA, rms) at 105°C, 100KHz. 尺寸 ΦD x L(mm), 纹波电流於 105°C, 100KHz

Note2: Produce custom product too, which are not found in these tables. 客户定制品不在标准品一览表内