

HZ *New!*
series

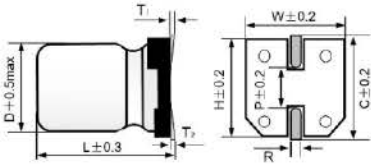
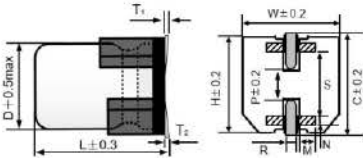
- Low ESR, high ripple current 低等效串联电阻, 耐高纹波电流
- Load life of 1000 hours at 165°C 工作寿命 165°C-1000 小时
- Compliant to the RoHS 2.0 directive 符合 RoHS2.0 规范
- Compliant to AEC-Q200, contact us for more information 符合 AEC-Q200 标准, 详情请另行咨询



Specifications 系列参数

Items 项目	Characteristics 特性	
Rated Voltage Range 额定电压范围	25V ~ 63V DC	
Capacitance Range 容量范围	56 ~ 560μF	
Capacitance Tolerance 容量偏差	M : ±20%	
Operating Temp. Range 工作温度范围	-55°C ~ +165°C	
Dissipation Factor 损耗角正切	Not to exceed the value specified 不超过规格值	
Leakage Current 漏电流	$I \leq 0.01CV$ (after 2 minutes) 充电 2 分钟后测试漏电流不超过 $0.01 \times (\text{静电容量 } \mu F) \times (\text{额定电压 } V)$	
ESR (100K~300KHz) 等效串联电阻	Not to exceed the value specified 不超过规格值	
Endurance: 165°C, 1000h Rated voltage applied (with the rated ripple current) 寿命: 165°C, 1000 小时 加载额定电压 (叠加额定纹波电流)	Capacitance Change 容量变化	Within ±30% of the value before test 初始值±30%以内
	Dissipation Factor 损耗角正切	Not to exceed 200% of the value specified 不超过 2 倍规格值
	ESR 等效串联电阻	Not to exceed 200% of the value specified 不超过 2 倍规格值
	Leakage current 漏电流	Not to exceed the value specified 不超过规格值
Moisture Resistance 85°C, RH85%, 2000h, Rated voltage applied 耐湿性 85°C, RH85%加载额定电压连续工作 2000 小时	Capacitance Change 容量变化	Within ±30% of the value before test 初始值±30%以内
	Dissipation Factor 损耗角正切	Not to exceed 200% of the value specified 不超过 2 倍规格值
	ESR 等效串联电阻	Not to exceed 200% of the value specified 不超过 2 倍规格值
	Leakage Current 漏电流	Not to exceed the value specified 不超过规格值

Dimensions 尺寸 (Unit单位:mm)

Standard 标准产品		<table><tr><th>ΦD</th><th>L</th><th>W</th><th>H</th><th>C</th><th>P</th><th>R</th><th>T₁、T₂</th></tr><tr><td>10</td><td>12.8</td><td>10.3</td><td>10.3</td><td>11.0</td><td>4.6</td><td>0.8~1.1</td><td>0.2max.</td></tr><tr><td>10</td><td>16.5</td><td>10.3</td><td>10.3</td><td>11.0</td><td>4.6</td><td>0.8~1.1</td><td>0.2max.</td></tr></table>	ΦD	L	W	H	C	P	R	T ₁ 、T ₂	10	12.8	10.3	10.3	11.0	4.6	0.8~1.1	0.2max.	10	16.5	10.3	10.3	11.0	4.6	0.8~1.1	0.2max.									
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Anti-vibration 耐振产品		<table><tr><th>ΦD</th><th>L</th><th>W</th><th>H</th><th>C</th><th>P</th><th>R</th><th>M</th><th>N</th><th>S</th><th>T₁、T₂</th></tr><tr><td>10</td><td>12.8</td><td>10.3</td><td>10.3</td><td>11.0</td><td>4.6</td><td>0.8~1.1</td><td>1.35</td><td>1.0</td><td>6.74</td><td>0.2max.</td></tr><tr><td>10</td><td>16.5</td><td>10.3</td><td>10.3</td><td>11.0</td><td>4.6</td><td>0.8~1.1</td><td>1.35</td><td>1.0</td><td>6.74</td><td>0.2max.</td></tr></table>	ΦD	L	W	H	C	P	R	M	N	S	T ₁ 、T ₂	10	12.8	10.3	10.3	11.0	4.6	0.8~1.1	1.35	1.0	6.74	0.2max.	10	16.5	10.3	10.3	11.0	4.6	0.8~1.1	1.35	1.0	6.74	0.2max.
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Capacitance List 容量对照表

W.V (S.V) SIZE	25 (31)	35 (44)	50 (63)	63 (79)
10×12.8	220 ~ 470 μ F	150 ~ 330 μ F	82 ~ 150 μ F	56 ~ 120 μ F
10×16.5	330 ~ 560 μ F	220 ~ 470 μ F	120 ~ 220 μ F	82 ~ 150 μ F

Characteristics List 规格特性表

W.V. 工作电压 (V)	Capacitance 容量 (μ F)	tg δ 损耗角正切 (120Hz, 20°C)	ESR 等效串联电阻 (m Ω , 100kHz)	Rated Ripple Current 额定纹波电流 (165°C, mA, r.m.s)	Size 尺寸 Φ D×L(mm)	Part Number 物料编码
25	470	0.12	14	2500	10×12.8	PHZ471M025G1DTR□□□□
	560	0.12	11	2900	10×16.5	PHZ561M025G1HTR□□□□
35	330	0.10	14	2500	10×12.8	PHZ331M035G1DTR□□□□
	470	0.10	11	2900	10×16.5	PHZ471M035G1HTR□□□□
50	150	0.10	17	2250	10×12.8	PHZ151M050G1DTR□□□□
	220	0.10	13	2600	10×16.5	PHZ221M050G1HTR□□□□
63	100	0.08	19	2100	10×12.8	PHZ101M063G1DTR□□□□
	150	0.08	15	2400	10×16.5	PHZ151M063G1HTR□□□□

* For the last 4 digits of the part number, please refer to the part number system on page 178 .

物料编码的最后 4 位，请参考 178 页物料编码系统。

Frequency Coefficient for Ripple Current 纹波电流频率系数

Frequency 频率	120Hz≤freq.<1KHz	1KHz≤freq.<10KHz	10KHz≤freq.<50KHz	50KHz≤freq.<100KHz	100KHz≤freq.<1000KHz
Coefficient 系数 (C≤47 μ F)	0.05	0.25	0.55	0.80	1.00
Coefficient 系数 (C > 47 μ F)	0.05	0.30	0.70	0.85	1.00