

HT series

- Low ESR, high ripple current 低等效串联电阻, 耐高纹波电流
- Load life of 4000 hours at 125°C 工作寿命 125°C-4000 小时
- Compliant to the RoHS2.0 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	16V ~ 80V DC	
Capacitance Range 容量范围	4.7 ~ 1200μF	
Capacitance Tolerance 容量偏差	M : ±20%	
Operating Temp. Range 工作温度范围	-55°C ~ +125°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: 125°C, 4000h Rated voltage applied (with the rated ripple current) 寿命: 125°C, 4000 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>6.3</td><td>6.2</td><td>6.6</td><td>6.6</td><td>7.2</td><td>2.1</td><td>0.5~0.8</td><td>0.2max.</td></tr><tr><td>6.3</td><td>7.7</td><td>6.6</td><td>6.6</td><td>7.2</td><td>2.1</td><td>0.5~0.8</td><td>0.2max.</td></tr><tr><td>8</td><td>10.5</td><td>8.3</td><td>8.3</td><td>9.0</td><td>3.2</td><td>0.8~1.1</td><td>0.2max.</td></tr><tr><td>10</td><td>10.5</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><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	6.3	6.2	6.6	6.6	7.2	2.1	0.5~0.8	0.2max.	6.3	7.7	6.6	6.6	7.2	2.1	0.5~0.8	0.2max.	8	10.5	8.3	8.3	9.0	3.2	0.8~1.1	0.2max.	10	10.5	10.3	10.3	11.0	4.6	0.8~1.1	0.2max.	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>T₁, T₂</th></tr><tr><td>6.3</td><td>6.5</td><td>6.6</td><td>6.6</td><td>7.2</td><td>2.1</td><td>0.5~0.8</td><td>0.2max.</td></tr><tr><td>6.3</td><td>8.0</td><td>6.6</td><td>6.6</td><td>7.2</td><td>2.1</td><td>0.5~0.8</td><td>0.2max.</td></tr></table>	ΦD	L	W	H	C	P	R	T ₁ , T ₂	6.3	6.5	6.6	6.6	7.2	2.1	0.5~0.8	0.2max.	6.3	8.0	6.6	6.6	7.2	2.1	0.5~0.8	0.2max.																																
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Capacitance List 容量对照表

SIZE \ W.V (S.V)	16 (20)	25 (31)	35 (44)	50 (63)	63 (79)	80 (100)
6.3×6.2	82 ~ 120 μ F	68 ~ 100 μ F	33 ~ 68 μ F	10 ~ 22 μ F	10 ~ 15 μ F	4.7 ~ 5.6 μ F
6.3×7.7	120 ~ 180 μ F	100 ~ 150 μ F	47 ~ 100 μ F	22 ~ 33 μ F	18 ~ 22 μ F	6.8 ~ 10 μ F
8×10.5	270 ~ 560 μ F	220 ~ 390 μ F	100 ~ 270 μ F	47 ~ 82 μ F	33 ~ 47 μ F	15 ~ 22 μ F
10×10.5	330 ~ 680 μ F	270 ~ 470 μ F	180 ~ 390 μ F	68 ~ 120 μ F	47 ~ 82 μ F	18 ~ 33 μ F
10×12.8	470 ~ 1000 μ F	390 ~ 680 μ F	270 ~ 470 μ F	82 ~ 150 μ F	56 ~ 100 μ F	27 ~ 47 μ F
10×16.5	680 ~ 1200 μ F	560 ~ 1000 μ F	330 ~ 680 μ F	100 ~ 220 μ F	82 ~ 150 μ F	33 ~ 68 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 (125°C, mA, r.m.s)	Size 尺寸 Φ D×L(mm)	Part Number 物料编码
16	100	0.10	40	1100	6.3×6.2	PHT101M016E62TR□□□□
	180	0.10	36	1300	6.3×7.7	PHT181M016E77TR□□□□
	470	0.10	18	1800	8×10.5	PHT471M016F1ETR□□□□
	680	0.12	15	2100	10×10.5	PHT681M016G1ETR□□□□
	1000	0.12	12	2600	10×12.8	PHT102M016G1DTR□□□□
	1200	0.12	10	3100	10×16.5	PHT122M016G1HTR□□□□
25	68	0.10	50	1000	6.3×6.2	PHT680M025E62TR□□□□
	150	0.10	45	1200	6.3×7.7	PHT151M025E77TR□□□□
	390	0.10	27	1600	8×10.5	PHT391M025F1ETR□□□□
	470	0.10	20	2000	10×10.5	PHT471M025G1ETR□□□□
	470	0.10	14	2500	10×12.8	PHT471M025G1DTR□□□□
	560	0.10	11	2900	10×16.5	PHT561M025G1HTR□□□□
35	47	0.10	60	1000	6.3×6.2	PHT470M035E62TR□□□□
	68	0.10	50	1200	6.3×7.7	PHT680M035E77TR□□□□
	270	0.10	27	1600	8×10.5	PHT271M035F1ETR□□□□
	390	0.10	20	2000	10×10.5	PHT391M035G1ETR□□□□
	470	0.10	14	2500	10×12.8	PHT471M035G1DTR□□□□
	560	0.10	11	2900	10×16.5	PHT561M035G1HTR□□□□
50	10	0.10	80	840	6.3×6.2	PHT100M050E62TR□□□□
	22	0.10	60	910	6.3×7.7	PHT220M050E77TR□□□□
	68	0.10	30	1250	8×10.5	PHT680M050F1ETR□□□□
	100	0.10	28	1600	10×10.5	PHT101M050G1ETR□□□□
	150	0.10	17	2250	10×12.8	PHT151M050G1DTR□□□□
	220	0.10	13	2600	10×16.5	PHT221M050G1HTR□□□□
63	10	0.10	80	810	6.3×6.2	PHT100M063E62TR□□□□
	22	0.10	60	880	6.3×7.7	PHT220M063E77TR□□□□
	47	0.08	30	1100	8×10.5	PHT470M063F1ETR□□□□
	82	0.08	28	1400	10×10.5	PHT820M063G1ETR□□□□
	100	0.08	19	2100	10×12.8	PHT101M063G1DTR□□□□
	150	0.08	15	2400	10×16.5	PHT151M063G1HTR□□□□
80	4.7	0.08	100	700	6.3×6.2	PHT4R7M080E62TR□□□□
	10	0.08	80	760	6.3×7.7	PHT100M080E77TR□□□□
	22	0.08	55	850	8×10.5	PHT220M080F1ETR□□□□

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 (125°C, mA, r.m.s)	Size 尺寸 $\Phi D \times L$ (mm)	Part Number 物料编码
80	33	0.08	50	1100	10×10.5	PHT330M080G1ETR□□□□
	47	0.08	25	1800	10×12.8	PHT470M080G1DTR□□□□
	68	0.08	18	2100	10×16.5	PHT680M080G1HTR□□□□

* 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 (47 μ F < C < 1000 μ F)	0.05	0.30	0.70	0.85	1.00
Coefficient 系数 (C > 1000 μ F)	0.10	0.33	0.85	1.00	1.00