

EMI Suppression Capacitors X1 series

金属化聚丙烯膜抗干扰电容器



应用

- X1类抗干扰电容器
- 广泛应用于电源跨线路等抗干扰场合
- 广泛应用于箝位电路，交流及谐波滤波，不断电系统，光伏逆变器，LCL滤波器及马达驱动

APPLICATIONS

- X1 class for interference suppression
- Widely used in across-the-line, EMI suppression
- Widely used in Clamping, AC and Harmonic Filtering, UPS Systems, Solar Inverter with LCL Filter and Motor Drive

性能参数 Technical data

气候类别 / 阻燃等级 Climatic Category / Passive Flammability Category	40/110/56/B		
工作温度范围 / Operating temperature range	-40°C ~ +110°C		
容量范围 / Capacitance range	0.001 ~ 10μF		
额定电压 / Rated voltage	AC 440V/480V/530V, 50~60Hz		
最大连续直流电压 / Maximum continuous DC voltage	DC 1000V		
容量偏差 / Cap.tol	±5% (J) ; ±10% (K) ; ±20% (M)		
损耗角正切 / Dissipation factor	C _N ≤ 0.47μF	0.47μF < C _N ≤ 1.0μF	C _N > 1.0μF
	≤ 1 × 10 ⁻³ (1kHz, 20°C)	≤ 2 × 10 ⁻³ (1kHz, 20°C)	≤ 3 × 10 ⁻³ (1kHz, 20°C)
绝缘电阻 / insulation resistance	V test (VDC) 1min	C _N ≤ 0.33μF	C _N > 0.33μF
	100 ± 15	≥ 30,000MΩ	≥ 10000s
直流电压测试 / DC test voltage	4.3U _R (DC), 2s		

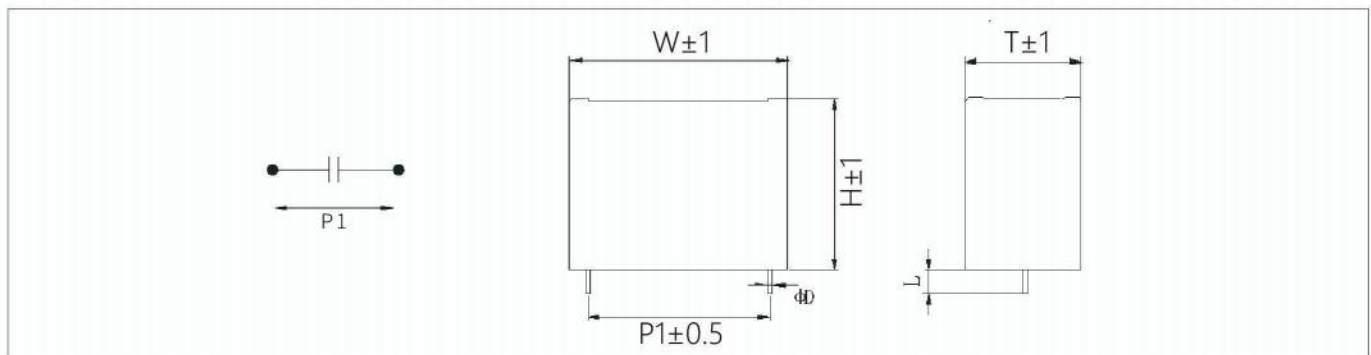


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DV/DT数据 THE DV/DT TABLE

Dv/dt (V/μs)					
P=10mm	P=15mm	P=22.5mm	P=27.5mm	P=37.5mm	P=52.5mm
475	400	200	150	100	75

产品结构图 THE CONTOUR MAP



编码规则 /PART NUMBER SYSTEM

Type code	Capacitance	Rated Voltage(AC)	Tolerance	Pin	Lead Pitch P1 (mm)	Lead Pitch P2 (mm)	Lead Pitch P2 (mm)	Internal code
1~3	4~6	7~10	11	12	13	14	15	16~17
MKP	105= 10×10^5 pF =1μF	0530=530VAC	J=±5% K=±10% M=±20%	2: 2Pin	2: P1=10 3: P1=15 4: P1=22.5 5: P1=27.5 6: P1=37.5 7: P1=52.5	0: 无	1: L=4 2: L=15	01

规格表 Specification table

C _N (μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number	C _N (μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number
0.0010	13.0	4.0	9.0	0.6	10.0	MKP1020530*220***	0.0082	13.0	4.0	9.0	0.6	10.0	MKP8220530*220***
0.0012	13.0	4.0	9.0	0.6	10.0	MKP1220530*220***	0.010	13.0	4.0	9.0	0.6	10.0	MKP1030530*220***
0.0015	13.0	4.0	9.0	0.6	10.0	MKP1520530*220***	0.012	13.0	5.0	11.0	0.6	10.0	MKP1230530*220***
0.0018	13.0	4.0	9.0	0.6	10.0	MKP1820530*220***	0.015	13.0	5.0	11.0	0.6	10.0	MKP1330530*220***
0.0022	13.0	4.0	9.0	0.6	10.0	MKP2220530*220***	0.018	13.0	5.0	11.0	0.6	10.0	MKP1830530*220***
0.0027	13.0	4.0	9.0	0.6	10.0	MKP2720530*220***	0.022	13.0	5.0	11.0	0.6	10.0	MKP2230530*220***
0.0033	13.0	4.0	9.0	0.6	10.0	MKP3320530*220***	0.027	13.0	6.0	12.0	0.6	10.0	MKP2730530*220***
0.0039	13.0	4.0	9.0	0.6	10.0	MKP3920530*220***	0.033	13.0	6.0	12.0	0.6	10.0	MKP3330530*220***
0.0047	13.0	4.0	9.0	0.6	10.0	MKP4720530*220***	0.039	13.0	7.0	13.0	0.6	10.0	MKP3930530*220***
0.0056	13.0	4.0	9.0	0.6	10.0	MKP5620530*220***	0.047	13.0	7.0	13.0	0.6	10.0	MKP4730530*220***
0.0068	13.0	4.0	9.0	0.6	10.0	MKP6820530*220***	0.047	13.0	8.0	14.0	0.6	10.0	MKP4730530*220***



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规格表 Specification table

续上表

C _N (μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number
0.056	13.0	8.0	14.0	0.6	10.0	MKP5630530*220***
0.010	17.5	5.0	9.5	0.6	15.0	MKP1030530*230***
0.012	17.5	5.0	9.5	0.6	15.0	MKP1230530*230***
0.015	17.5	5.0	9.5	0.6	15.0	MKP1530530*230***
0.018	17.5	5.0	9.5	0.6	15.0	MKP1830530*230***
0.022	17.5	5.0	9.5	0.6	15.0	MKP2230530*230***
0.027	17.5	5.0	11.0	0.6	15.0	MKP2730530*230***
0.033	17.5	5.0	11.0	0.6	15.0	MKP3330530*230***
0.039	17.5	6.0	12.0	0.6	15.0	MKP3930530*230***
0.047	17.5	6.0	12.0	0.6	15.0	MKP4730530*230***
0.056	17.5	6.0	12.0	0.6	15.0	MKP5630530*230***
0.056	17.5	7.0	12.0	0.6	15.0	MKP5630530*230***
0.068	17.5	7.5	13.5	0.6	15.0	MKP6830530*230***
0.068	17.5	13.0	12.0	0.6	15.0	MKP6830530*230***
0.082	17.5	8.0	14.0	0.6	15.0	MKP8230530*230***
0.10	17.5	8.0	14.0	0.6	15.0	MKP1040530*230***
0.10	17.5	8.5	14.0	0.6	15.0	MKP1040530*230***
0.12	17.5	10.0	16.0	0.8	15.0	MKP1240530*230***
0.15	17.5	10.0	16.0	0.8	15.0	MKP1540530*230***
0.15	17.5	11.0	19.0	0.8	15.0	MKP1540530*230***
0.18	17.5	11.0	19.0	0.8	15.0	MKP1840530*230***
0.039	26.5	6.0	15.0	0.8	22.5	MKP3930530*240***
0.047	26.5	6.0	15.0	0.8	22.5	MKP4730530*240***
0.056	26.5	6.0	15.0	0.8	22.5	MKP5630530*240***
0.068	26.5	6.0	15.0	0.8	22.5	MKP6830530*240***
0.082	26.5	6.0	15.0	0.8	22.5	MKP8230530*240***
0.10	26.5	6.0	15.0	0.8	22.5	MKP1040530*240***
0.12	26.5	6.0	15.0	0.8	22.5	MKP1240530*240***
0.15	26.5	7.0	16.0	0.8	22.5	MKP1540530*240***
0.18	26.5	8.5	17.0	0.8	22.5	MKP1840530*240***
0.22	26.5	8.5	17.0	0.8	22.5	MKP2240530*240***
0.27	26.5	10.0	18.5	0.8	22.5	MKP2740530*240***
0.33	26.5	11.0	20.0	0.8	22.5	MKP3340530*240***
0.39	26.5	11.0	20.0	0.8	22.5	MKP3940530*240***
0.47	26.5	12.0	22.0	0.8	22.5	MKP4740530*240***
0.47	26.5	13.5	23.0	0.8	22.5	MKP4740530*240***
0.56	26.5	13.5	23.0	0.8	22.5	MKP5640530*240***
0.56	26.5	15.5	24.5	0.8	22.5	MKP5640530*240***
0.68	26.5	15.5	24.5	0.8	22.5	MKP6840530*240***
0.15	32.0	9.0	18.0	0.8	27.5	MKP1540530*250***
0.18	32.0	9.0	18.0	0.8	27.5	MKP1840530*250***
0.22	32.0	9.0	18.0	0.8	27.5	MKP2240530*250***
0.27	32.0	9.0	18.0	0.8	27.5	MKP2740530*250***
0.33	32.0	9.0	18.0	0.8	27.5	MKP3340530*250***
0.33	32.0	18.0	12.0	0.8	27.5	MKP3340530*250***
0.39	32.0	11.0	20.0	0.8	27.5	MKP3940530*250***

C _N (μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number
0.47	32.0	11.0	20.0	0.8	27.5	MKP4740530*250***
0.47	32.0	22.0	12.0	0.8	27.5	MKP4740530*250***
0.56	32.0	13.0	22.0	0.8	27.5	MKP5640530*250***
0.68	32.0	13.0	22.0	0.8	27.5	MKP6840530*250***
0.68	32.0	13.0	25.0	0.8	27.5	MKP6840530*250***
0.68	32.0	15.0	24.5	0.8	27.5	MKP6840530*250***
0.68	32.0	22.0	16.0	0.8	27.5	MKP6840530*250***
0.82	32.0	13.0	25.0	0.8	27.5	MKP8240530*250***
0.82	32.0	15.0	24.5	0.8	27.5	MKP8240530*250***
0.82	32.0	14.0	28.0	0.8	27.5	MKP8240530*250***
1.0	32.0	27.5	16.0	0.8	27.5	MKP1050530*250***
1.0	32.0	31.0	18.5	0.8	27.5	MKP1050530*250***
1.0	32.0	17.0	18.0	0.8	27.5	MKP1050530*250***
1.0	32.0	16.0	30.0	0.8	27.5	MKP1050530*250***
1.2	32.0	16.0	30.0	0.8	27.5	MKP1250530*250***
1.2	32.0	17.0	28.0	0.8	27.5	MKP1250530*250***
1.2	32.0	19.0	29.0	0.8	27.5	MKP1250530*250***
1.2	32.0	18.0	33.0	0.8	27.5	MKP1250530*250***
1.5	32.0	19.0	29.0	0.8	27.5	MKP1550530*250***
1.	32.0	31.0	18.5	0.8	27.5	MKP1550530*250***
1.5	32.0	18.0	33.0	0.8	27.5	MKP1550530*250***
1.8	32.0	22.0	37.0	0.8	27.5	MKP1850530*250***
2.2	32.0	22.0	37.0	0.8	27.5	MKP2250530*250***
0.33	41.0	11.0	22.0	1.0	37.5	MKP3340530*260***
0.39	41.0	11.0	22.0	1.0	37.5	MKP3940530*260***
0.47	41.0	11.0	22.0	1.0	37.5	MKP4740530*260***
0.56	41.0	11.0	22.0	1.0	37.5	MKP5640530*260***
0.68	41.0	11.0	22.0	1.0	37.5	MKP6840530*260***
0.82	41.0	11.0	22.0	1.0	37.5	MKP8240530*260***
0.82	41.0	113.0	24.0	1.0	37.5	MKP8240530*260***
1.0	41.0	13.0	24.0	1.0	37.5	MKP1050530*260***
1.0	42.0	24.0	15.0	1.0	37.5	MKP1050530*260***
1.2	41.0	15.0	26.0	1.0	37.5	MKP1250530*260***
1.2	42.0	14.0	28.0	1.0	37.5	MKP1050530*260***
1.5	41.0	15.0	26.0	1.0	37.5	MKP1550530*260***
1.5	42.0	14.0	28.0	1.0	37.5	MKP1550530*260***
1.5	41.0	16.0	30.0	1.0	37.5	MKP1550530*260***
1.5	42.0	24.0	19.0	1.0	37.5	MKP1550530*260***
1.8	41.0	16.0	30.0	1.0	37.5	MKP1850530*260***
1.8	41.0	17.0	32.0	1.0	37.5	MKP1850530*260***
2.2	41.0	17.0	32.0	1.0	37.5	MKP2250530*260***
2.2	41.0	18.5	33.5	1.0	37.5	MKP2250530*260***
2.7	41.0	22.0	37.0	1.0	37.5	MKP2750530*260***
3.3	41.0	22.0	37.0	1.0	37.5	MKP3350530*260***
3.3	41.0	26.0	41.0	1.0	37.5	MKP3350530*260***
3.3	41.5	27.5	37.5	1.0	37.5	MKP3350530*260***



规格表 Specification table

续上表

CN(μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number
3.9	41.0	26.0	41.0	1.0	37.5	MKP3950530*260***
3.9	41.5	27.5	37.5	1.0	37.5	MKP3950530*260***
4.7	41.0	28.0	43.0	1.0	37.5	MKP4750530*260***
4.7	42.0	30.0	45.0	1.0	37.5	MKP4750530*260***
4.7	57.0	24.0	38.0	1.2	52.5	MKP4750530*270***

CN(μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number
5.6	57.0	30.0	45.0	1.2	52.5	MKP5650530*270***
6.8	57.0	30.0	45.0	1.2	52.5	MKP6850530*270***
6.8	57.0	44.0	30.0	1.2	52.5	MKP6850530*270***
8.2	57.0	35.0	50.0	1.2	52.5	MKP8250530*270***
10.0	57.0	35.0	50.0	1.2	52.5	MKP1060530*270***

金属化聚丙烯薄膜

Metallized polypropylene film

能承受过压冲击

Withstanding overvoltage stressing

优异的阻燃性能

Excellent active and passive flame resistant abilities



自愈特性

Self-healing properties

符合RoHS标准

RoHS-compatible

适用于严苛环境

Suitable for harsh environment conditions

符合85°C85%RH 1.0URAC 1000 小时
THB Grade IIIB (85°C, 85% RH, 1000h at URAC)



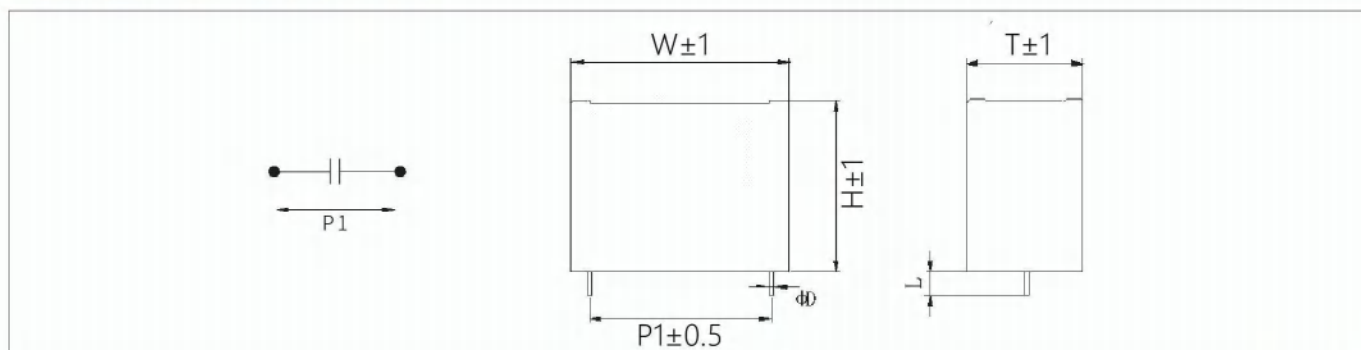
应用

- X1类抗干扰电容器
- 广泛应用于电源跨线路等抗干扰场合
- 广泛应用于箝位电路，交流及谐波滤波，不断电系统，光伏逆变器，LCL滤波器及马达驱动

APPLICATIONS

- X1 class for interference suppression
- Widely used in across-the-line, EMI suppression
- Widely used in Clamping, AC and Harmonic Filtering, UPS Systems, Solar Inverter with LCL Filter and Motor Drive

产品结构图 THE CONTOUR MAP



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金属化聚丙烯膜抗干扰电容器

性能参数 Technical data

气候类别 / 阻燃等级 Climatic Category / Passive Flammability Category	40/110/56/B		
工作温度范围/ Operating temperature range	-40°C~ +110°C		
容量范围/ Capacitance range	0.001~2.2μF		
额定电压/ Rated voltage	AC 760V,50~60Hz		
最大连续直流电压/ Maximum continuous DC voltage	DC 1500V		
容量偏差/ Cap.tol	±5% (J) ; ±10% (K) ; ±20% (M)		
损耗角正切/ Dissipation factor	$C_N \leq 0.47\mu F$	$0.47\mu F < C_N \leq 1.0\mu F$	$C_N > 1.0\mu F$
	$\leq 1 \times 10^{-3}$ (1kHz, 20°C)	$\leq 2 \times 10^{-3}$ (1kHz, 20°C)	$\leq 3 \times 10^{-3}$ (1kHz, 20°C)
绝缘电阻/insulation resistance	V test(VDC) 1min	$C_N \leq 0.33\mu F$	$C_N > 0.33\mu F$
	100±15	$\geq 30,000M\Omega$	$\geq 10000s$
直流电压测试/ DC test voltage	4.3U _R (DC), 2s		

DV/DT数据 THE DV/DT TABLE

Dv/dt (V/μs)					
P=10mm	P=15mm	P=22.5mm	P=27.5mm	P=37.5mm	P=52.5mm
475	400	200	150	150	75

编码规则 /PART NUMBER SYSTEM

Type code	Capacitance	Rated Voltage(AC)	Tolerance	Pin	Lead Pitch P1 (mm)	Lead Pitch P2 (mm)	Lead Pitch P2 (mm)	Internal code
1~3	4~6	7~10	11	12	13	14	15	16~17
MKP	105= 10×10^5 pF =1μF	0760=760VAC	J=±5% K=±10% M=±20%	2: 2Pin	2: P1=10 3: P1=15 4: P1=22.5 5: P1=27.5 6: P1=37.5 7: P1=52.5	0: 无	1: L=4 2: L=15	01

规格表 Specification table

续上表

C _N (μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number	C _N (μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number
0.0010	17.5	5.0	9.5	0.6	15	MKP1020760*230***	0.0027	17.5	5.0	9.5	0.6	15	MKP2720760*230***
0.0012	17.5	5.0	9.5	0.6	15	MKP1220760*230***	0.0033	17.5	5.0	11.0	0.6	15	MKP3320760*230***
0.0015	17.5	5.0	9.5	0.6	15	MKP1520760*230***	0.0047	17.5	5.0	11.0	0.6	15	MKP4720760*230***
0.0018	17.5	5.0	9.5	0.6	15	MKP1820760*230***	0.0056	17.5	5.0	11.0	0.6	15	MKP5620760*230***
0.0022	17.5	5.0	9.5	0.6	15	MKP2220760*230***	0.0068	17.5	5.0	11.0	0.6	15	MKP6820760*230***



05

规格表 Specification table

续上表

CN(μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number
0.0082	17.5	5.0	11.0	0.6	15	MKP8220760*230***
0.010	17.5	5.0	11.0	0.6	15	MKP1030760*230***
0.012	17.5	6.0	12.0	0.6	15	MKP1230760*230***
0.015	17.5	6.0	12.0	0.6	15	MKP1530760*230***
0.018	17.5	7.0	12.0	0.6	15	MKP1830760*230***
0.022	17.5	7.5	13.5	0.6	15	MKP2230760*230***
0.027	17.5	8.0	14.0	0.6	15	MKP2730760*230***
0.033	17.5	8.5	14.5	0.6	15	MKP3330760*230***
0.039	17.5	10.0	16.0	0.8	15	MKP3930760*230***
0.047	17.5	10.0	16.0	0.8	15	MKP4730760*230***
0.047	17.5	11.0	19.0	0.8	15	MKP4730760*230***
0.056	17.5	11.0	19.0	0.8	15	MKP5630760*230***
0.068	17.5	11.0	19.0	0.8	15	MKP6830760*230***
0.010	26.5	6.0	15.0	0.8	22.5	MKP1030760*240***
0.012	26.5	6.0	15.0	0.8	22.5	MKP1230760*240***
0.015	26.5	6.0	15.0	0.8	22.5	MKP1530760*240***
0.018	26.5	6.0	15.0	0.8	22.5	MKP1830760*240***
0.022	26.5	6.0	15.0	0.8	22.5	MKP2230760*240***
0.027	26.5	6.0	15.0	0.8	22.5	MKP2730760*240***
0.033	26.5	6.0	15.0	0.8	22.5	MKP3330760*240***
0.039	26.5	6.0	15.0	0.8	22.5	MKP3930760*240***
0.047	26.5	6.0	15.0	0.8	22.5	MKP4730760*240***
0.056	26.5	7.0	16.0	0.8	22.5	MKP5630760*240***
0.068	26.5	7.0	16.0	0.8	22.5	MKP6830760*240***
0.082	26.5	8.5	17.0	0.8	22.5	MKP8230760*240***
0.10	26.5	8.5	17.0	0.8	22.5	MKP1040760*240***
0.10	26.5	10.0	18.5	0.8	22.5	MKP1040760*240***
0.12	26.5	10.0	18.5	0.8	22.5	MKP1240760*240***
0.15	26.5	11.0	20.0	0.8	22.5	MKP1540760*240***
0.18	26.5	12.0	22.0	0.8	22.5	MKP1840760*240***
0.22	26.5	12.0	22.0	0.8	22.5	MKP2240760*240***
0.22	26.5	13.5	23.0	0.8	22.5	MKP2240760*240***
0.27	26.5	15.5	24.5	0.8	22.5	MKP2740760*240***
0.33	26.5	14.5	29.5	0.8	22.5	MKP3340760*240***
0.068	32.0	9.0	18.0	0.8	27.5	MKP6830760*250***
0.082	32.0	9.0	18.0	0.8	27.5	MKP8230760*250***
0.10	32.0	9.0	18.0	0.8	27.5	MKP1040760*250***
0.10	32.0	18.0	12.0	0.8	27.5	MKP1040760*250***
0.12	32.0	9.0	18.0	0.8	27.5	MKP1240760*250***
0.15	32.0	18.0	12.0	0.8	27.5	MKP1540760*250***
0.15	32.0	22.0	12.0	0.8	27.5	MKP1540760*250***
0.15	32.0	11.0	20.0	0.8	27.5	MKP1540760*250***
0.18	32.0	11.0	20.0	0.8	27.5	MKP1840760*250***
0.22	32.0	13.0	22.0	0.8	27.5	MKP2240760*250***
0.22	32.0	22.0	12.0	0.8	27.5	MKP2240760*250***
0.22	32.0	22.0	16.0	0.8	27.5	MKP2240760*250***

CN(μF)	W(mm)	T(mm)	H(mm)	φD(mm)	P1(mm)	Part number
0.27	32.0	13.0	22.0	0.8	27.5	MKP2740760*250***
0.33	32.0	15.0	24.5	0.8	27.5	MKP3340760*250***
0.33	32.0	14.0	28.0	0.8	27.5	MKP3340760*250***
0.33	32.0	27.5	16.0	0.8	27.5	MKP3340760*250***
0.39	32.0	17.0	28.0	0.8	27.5	MKP3940760*250***
0.39	32.0	16.0	30.0	0.8	27.5	MKP3940760*250***
0.47	32.0	17.0	28.0	0.8	27.5	MKP4740760*250***
0.47	32.0	19.0	29.0	0.8	27.5	MKP4740760*250***
0.47	32.0	16.0	30.0	0.8	27.5	MKP4740760*250***
0.47	32.0	31.0	18.5	0.8	27.5	MKP4740760*250***
0.56	32.0	18.0	33.0	0.8	27.5	MKP5640760*250***
0.68	32.0	22.0	37.0	0.8	27.5	MKP6840760*250***
0.33	41.0	12.0	26.0	1.0	37.5	MKP3340760*260***
0.33	41.0	13.0	24.0	1.0	37.5	MKP3340760*260***
0.33	42.0	24.0	15.0	1.0	37.5	MKP3340760*260***
0.39	41.0	12.0	26.0	1.0	37.5	MKP3940760*260***
0.39	41.0	13.0	24.0	1.0	37.5	MKP3940760*260***
0.47	42.0	24.0	15.0	1.0	37.5	MKP4740760*260***
0.47	41.0	15.0	26.0	1.0	37.5	MKP4740760*260***
0.47	42.0	14.0	28.0	1.0	37.5	MKP4740760*260***
0.56	41.0	16.0	30.0	1.0	37.5	MKP5640760*260***
0.68	42.0	24.0	19.0	1.0	37.5	MKP6840760*260***
0.68	41.0	26.0	20.0	1.0	37.5	MKP6840760*260***
0.68	41.0	16.0	30.0	1.0	37.5	MKP6840760*260***
0.82	41.0	18.5	33.5	1.0	37.5	MKP8240760*260***
1.0	41.0	18.5	33.5	1.0	37.5	MKP1050760*260***
1.0K	41.0	22.0	37.0	1.0	37.5	MKP1050760*260***
1.0	42.0	32.0	24.0	1.0	37.5	MKP1050760*260***
1.2	41.0	22.0	37.0	1.0	37.5	MKP1250760*260***
1.5	41.0	26.0	41.0	1.0	37.5	MKP1550760*260***
1.5	41.5	27.5	37.5	1.0	37.5	MKP1550760*260***
1.8	41.0	26.0	41.0	1.0	37.5	MKP1850760*260***
1.8	41.5	27.5	37.5	1.0	37.5	MKP1850760*260***
1.8	41.0	28.0	43.0	1.0	37.5	MKP1850760*260***
2.2	42.0	30.0	45.0	1.0	37.5	MKP2250760*260***

