

General Technical Characteristics 一般特性

Non-inductive, low equivalent inductance;
 High vacuum impregnation treatment, low loss, low temperature resistance;
 Foil-type structure, strong inrush resistance and high current impact resistance;
 No self-healing failure problem with stable capacity;
 Oil-free, explosion-proof available;
 Insulators with high strength, fatigue resistance and excellent electrical performance.
 Long lifetime $\geq 200,000$ h.

Typical Applications 典型应用

Mainly used to limit the excessive voltage rise rate of the circuit and protect the switching and protection of semiconductors in power electronic equipment;
 Filtering and energy storage.
 The main application areas are rectifiers, SVC, locomotive power supplies, etc.

GENERAL TECHNICAL CHARACTERISTICS 技术特性

Case 外壳材料	Aluminum, abrasive oxidation treatment
Output 引出端	Polymer insulator
Installation 安装位置	indoor

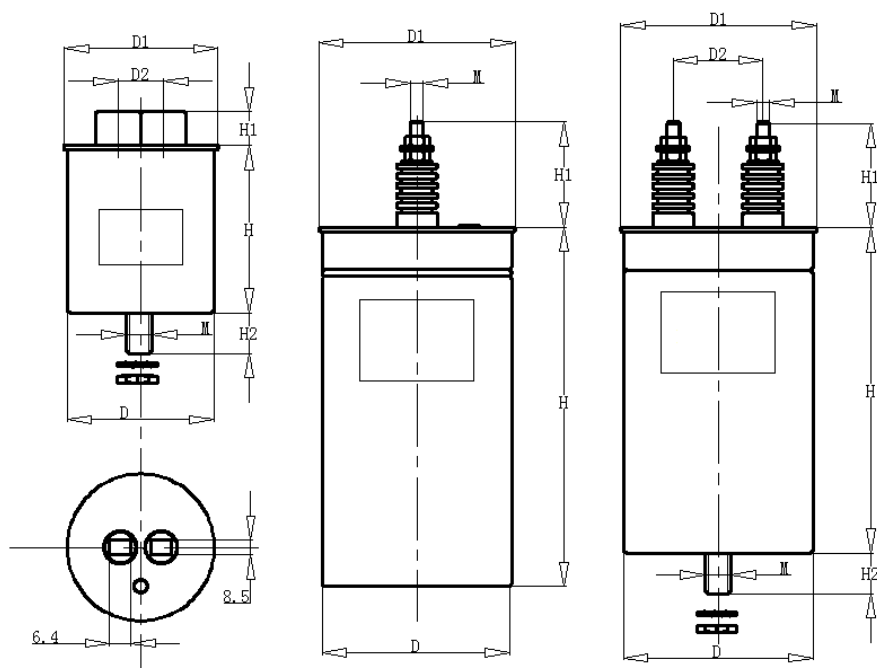
ELECTRICAL CHARACTERISTICS 电气特性

Reference standards 参考标准	IEC 61071, IEC 61881
Operating temperature 运行温度	- 40 to + 70 °C (hotspot temperature)
Storage temperature 存储温度	- 40 to + 85 °C
Capacitance range 容量范围	0.1 to 10 μ F
Rated voltage range 额定电压	1700Vdc to 10000 Vdc / 1000Vac to 7000 Vac
Capacitance tolerance 容量偏差	$\pm 5\%$, $\pm 10\%$
Dissipation factor $\tan \delta$ 损耗角正切	$\leq 3 \times 10^{-4}$ Measured at 100 Hz and 20 ± 5 °C
Life expectancy 预期寿命	$\geq 200,000$ hours at U_N

TEST METHODS AND PERFORMANCES 测试方法

Test voltage terminal to terminal U_{TT} 两端耐压	2.0 U_N for 10s
Test voltage terminal to case U_{TC} 端壳耐压	(2 U_N +1000)VAC/50Hz for 10s
Permissible relative humidity 允许相对湿度	95% RH
Climatic Category 气候类别	40/85/21

OUTLINE DRAWING 外形图



HOW TO ORDER:

K5D	172D	105	K	R	M	7	S	***
Series	Voltage:	Capacitance:	Cap. Tol.:	Shape:	Output:	Output size:	Installation	Internal
Code: K5D:	102A:	104: 0.10μF	J: ± 5%,	R:	F: Thread	7: M6*10	Method:	Code
AHD Series	1000Vac	105: 1.0μF	K: ± 10%	Round	M: Lead screw	9: M8*20	C: Clamp	
	252D:				L: Lug		S: Stud	
	2500Vdc						mounting	

ELECTRICAL SPECIFICATION 规格型号参考

Unit: mm

Part Number	Cap (μF)	Dimension		Fixing bolt	I _{max} @45°C @10KHz (A)	I _{peak} (KA)	I _s (KA)
		D	H				
U_{NDC} 1700Vdc, U_N 1000Vac, U_S 2500V, U_{BB} 1500Vac, U_{BG} 2400Vac							
K5D172D104KRM####	0.1	50.0	55.0	M8	10	0.2	1.2
K5D172D224KRM####	0.22	50.0	55.0	M8	10	0.2	1.6
K5D172D334KRM####	0.33	50.0	55.0	M8	10	0.2	1.6
K5D172D474KRM####	0.47	50.0	55.0	M8	10	0.2	1.6
K5D172D504KRM####	0.5	50.0	55.0	M8	10	0.2	1.6
K5D172D105KRM####	1.0	50.0	75.0	M12	18	0.2	1.6
K5D172D205KRM####	2.0	50.0	75.0	M12	18	0.3	2.0
K5D172D305KRM####	3.0	60.0	90.0	M12	18	0.5	2.8
K5D172D405KRM####	4.0	60.0	122.0	M12	18	0.7	3.0
K5D172D605KRM####	6.0	60.0	152.0	M12	18	0.9	3.5
K5D172D106KRM####	10.0	76.0	152.0	M12	18	1.2	4.0
U_{NDC} 2500Vdc, U_N 1600Vac, U_S 3800V, U_{BB} 2400Vac, U_{BG} 3300Vac							
K5D252D104KRM####	0.1	50.0	55.0	M8	10	0.2	1.2
K5D252D224KRM####	0.22	50.0	55.0	M8	10	0.2	1.6
K5D252D334KRM####	0.33	50.0	75.0	M12	10	0.2	1.6
K5D252D474KRM####	0.47	50.0	75.0	M12	18	0.2	1.6
K5D252D504KRM####	0.5	50.0	75.0	M12	18	0.2	1.6
K5D252D105KRM####	1.0	60.0	90.0	M12	18	0.2	1.6
K5D252D205KRM####	2.0	60.0	122.0	M12	18	0.3	2.0
K5D252D305KRM####	3.0	60.0	152.0	M12	18	0.5	2.8
K5D252D405KRM####	4.0	76.0	122.0	M12	18	0.7	3.0
K5D252D605KRM####	6.0	76.0	152.0	M12	18	0.9	3.5
K5D252D106KRM####	10.0	96.0	152.0	M16	18	1.2	4.0
U_{NDC} 3000Vdc, U_N 2000Vac, U_S 4500V, U_{BB} 3000Vac, U_{BG} 3800Vac							
K5D302D104KRM####	0.1	50.0	55.0	M8	10	0.2	1.2
K5D302D224KRM####	0.22	50.0	55.0	M8	10	0.2	1.6
K5D302D334KRM####	0.33	50.0	75.0	M12	10	0.2	1.6
K5D302D474KRM####	0.47	50.0	75.0	M12	18	0.2	1.6
K5D302D504KRM####	0.5	50.0	75.0	M12	18	0.2	1.6
K5D302D105KRM####	1.0	60.0	90.0	M12	18	0.2	1.6
K5D302D205KRM####	2.0	76.0	122.0	M12	18	0.3	2.0
K5D302D305KRM####	3.0	76.0	122.0	M12	18	0.5	2.8
K5D302D405KRM####	4.0	76.0	152.0	M12	18	0.7	3.0
K5D302D605KRM####	6.0	86.0	152.0	M12	18	0.9	3.5
K5D302D106KRM####	10.0	106.0	152.0	M16	18	1.2	4.0
U_{NDC} 4000Vdc, U_N 2500Vac, U_S 6000V, U_{BB} 3750Vac, U_{BG} 4500Vac							
K5D402D104KRM####	0.1	60.0	60.0	M12	10	0.2	1.4
K5D402D224KRM####	0.22	60.0	60.0	M12	10	0.2	1.8
K5D402D334KRM####	0.33	60.0	90.0	M12	10	0.2	1.8
K5D402D474KRM####	0.47	60.0	90.0	M12	18	0.2	1.8
K5D402D504KRM####	0.5	60.0	90.0	M12	18	0.2	1.8
K5D402D105KRM####	1.0	60.0	122.0	M12	18	0.2	1.8

Remark: 1. ## Output and output size; *** Internal code.

2. Customization for special specification and requirement is available.

Part Number	Cap (μF)	Dimension		Fixing bolt	I _{max} @45°C @10KHz (A)	I _{peak} (KA)	I _s (KA)
		D	H				
U_{NDC} 4000Vdc, U_N 2500Vac, U_S 6000V, U_{BB} 3750Vac, U_{BG} 4500Vac							
K5D402D205KRM####	2.0	76.0	122.0	M12	18	0.4	2.2
K5D402D305KRM####	3.0	76.0	152.0	M12	18	0.6	3.0
K5D402D405KRM####	4.0	86.0	152.0	M16	18	0.8	3.5
K5D402D605KRM####	6.0	106.0	152.0	M16	18	1.0	4.0
K5D402D106KRM####	10.0	116.0	182.0	M16	18	1.5	4.5
U_{NDC} 4500Vdc, U_N 3000Vac, U_S 6750V, U_{BB} 4500Vac, U_{BG} 5200Vac							
K5D452D104KRM####	0.1	60.0	60.0	M12	18	0.4	1.6
K5D452D224KRM####	0.22	60.0	60.0	M12	18	0.6	2.0
K5D452D334KRM####	0.33	60.0	60.0	M12	18	0.6	2.0
K5D452D474KRM####	0.47	60.0	90.0	M12	18	0.6	2.0
K5D452D504KRM####	0.5	60.0	122.0	M12	18	0.6	2.0
K5D452D105KRM####	1.0	76.0	122.0	M12	18	0.7	2.0
K5D452D205KRM####	2.0	76.0	152.0	M12	18	1.5	4.0
K5D452D305KRM####	3.0	96.0	152.0	M16	18	1.8	6.0
K5D452D405KRM####	4.0	106.0	152.0	M16	18	3.5	8.0
K5D452D605KRM####	6.0	106.0	182.0	M16	18	4.0	12.0
K5D452D106KRM####	10.0	116.0	272.0	M16	18	5.0	14.0
U_{NDC} 5000Vdc, U_N 4000Vac, U_S 7500V, U_{BB} 6000Vac, U_{BG} 6600Vac							
K5D502D104KRM####	0.1	76.0	122.0	M12	18	0.5	1.8
K5D502D224KRM####	0.22	76.0	122.0	M12	18	0.7	2.2
K5D502D334KRM####	0.33	76.0	122.0	M12	18	0.7	2.2
K5D502D474KRM####	0.47	76.0	122.0	M12	18	0.7	2.2
K5D502D504KRM####	0.5	76.0	122.0	M12	18	0.7	2.2
K5D502D105KRM####	1.0	86.0	152.0	M12	18	0.8	2.4
K5D502D205KRM####	2.0	106.0	152.0	M16	18	1.7	5.0
K5D502D305KRM####	3.0	106.0	182.0	M16	18	2.0	7.0
K5D502D405KRM####	4.0	106.0	272.0	M16	18	3.7	11.0
U_{NDC} 8000Vdc, U_N 5000Vac, U_S 12000V, U_{BB} 7500Vac							
K5D802D104KRM####	0.1	76.0	122.0	M12	18	1.0	2.0
K5D802D224KRM####	0.22	76.0	122.0	M12	18	1.2	2.5
K5D802D334KRM####	0.33	76.0	152.0	M12	18	1.2	2.5
K5D802D474KRM####	0.47	76.0	152.0	M12	18	1.2	2.5
K5D802D504KRM####	0.5	76.0	152.0	M12	18	1.2	2.5
K5D802D105KRM####	1.0	106.0	152.0	M12	18	1.5	4.0
K5D802D205KRM####	2.0	116.0	182.0	M16	18	2.0	6.0
K5D802D305KRM####	3.0	116.0	272.0	M16	18	2.4	9.0
U_{NDC} 9000Vdc, U_N 6000Vac, U_S 13500V, U_{BB} 8000Vac							
K5D902D104KRM####	0.1	76.0	122.0	M12	18	1.2	2.5
K5D902D224KRM####	0.22	76.0	152.0	M12	18	1.5	3.0
K5D902D334KRM####	0.33	76.0	152.0	M12	18	1.5	3.0
K5D902D474KRM####	0.47	76.0	152.0	M12	18	1.5	3.0
K5D902D504KRM####	0.5	86.0	152.0	M12	18	1.5	3.0
K5D902D105KRM####	1.0	106.0	152.0	M12	18	2.0	6.0
K5D902D205KRM####	2.0	116.0	202.0	M16	18	3.0	6.0
U_{NDC} 10000Vdc, U_N 7000Vac, U_S 15000V, U_{BB} 10500Vac							
K5D103D104KRM####	0.1	76.0	122.0	M12	18	1.8	4.0
K5D103D224KRM####	0.22	76.0	152.0	M12	18	2.0	6.0
K5D103D334KRM####	0.33	86.0	152.0	M12	18	2.2	6.0
K5D103D474KRM####	0.47	86.0	152.0	M12	18	2.2	6.0
K5D103D504KRM####	0.5	86.0	152.0	M12	18	2.2	6.0
K5D103D105KRM####	1.0	106.0	182.0	M12	18	4.0	12.0
K5D103D205KRM####	2.0	116.0	272.0	M16	18	6.0	12.0

Remark: 1. ## Output and output size; *** Internal code.

2. Customization for special specification and requirement is available.