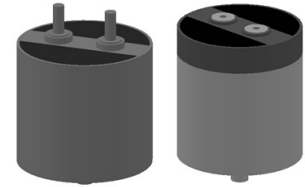


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Single Phase AC filter Capacitor With Aluminum Case

❖ General Description



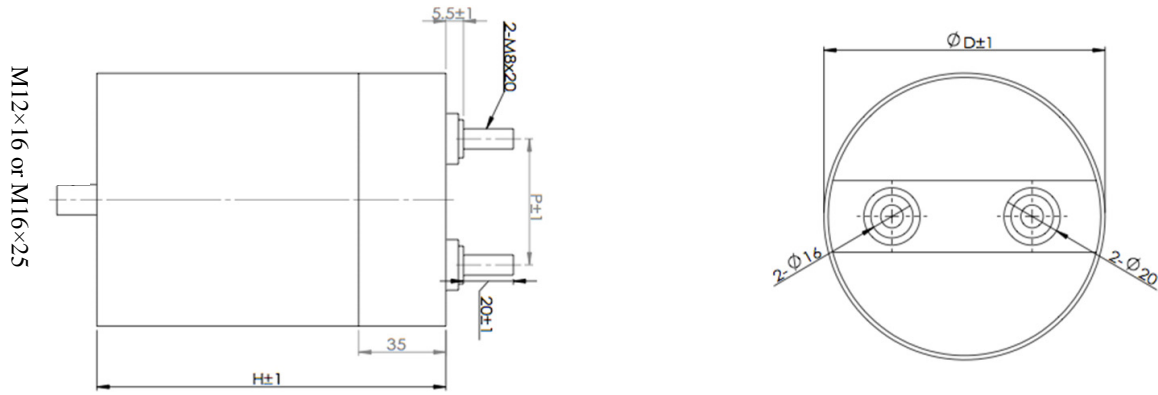
Standard Reference	IEC 61071
Climatic Category	40 / 85 / 56
Max . Altitude	2000 m
Dielectric Material	Self-Healing Metallized Polypropylene
Case Type	Aluminum Case, Resin filled, UL94V-0
Terminals Type	Male or Female screw terminals
Capacitance Range	Cn: 1.0μF ~ 1000μF
Capacitance Tolerance	J (±5%), K(±10%)
Dielectric Dissipation Factor	Dielectric Dissipation Factor (tg δ): 0.0002 (1kHz , 20°C)
Insulation Resistance	IR × Cn : ≥ 10000s (100Vdc, 60s, 20°C)
Rated Voltage	Urms : 300VAC ~ 3000VAC
Test voltage UTT	UTT: 1.5Urms (10s , 20°C) –Test voltage between both terminals
Test voltage UTC	UTC: 3k~6kVac (10s , 20°C) –Test voltage between terminals with case
	1.1 × Un : 30% of on-load duration
	1.15 × Un : 30 min/day
Maximum Over Voltage	1.2 × Un : 5 min/day
	1.3 × Un : 1 min/day
	1.5 × Un : 30 ms/time, 1000 times during the life of the capacitor
Operating Temperature	-40°C ~ +85°C; Θhs ≤ 85°C, 1.0Urms
Storage Temperature	-40°C ~ +85°C
Lifetime Expectancy	30,000 hours (1.0Urms , Θhs ≤ 70°C)
Max. Torque of terminals	M6 Female screw: 5 Nm , M8 Male screw: 6.5 Nm
Max. Torque of installation	M12/M16 Stud mounting : 10 Nm
Applications	Input or output LC Filter for inverter or motor running
Remarks	RoHs Compliant on request. Add "R" to p/n. *Other capacitance, Voltage and dimensions are available on request

❖ Part Number System

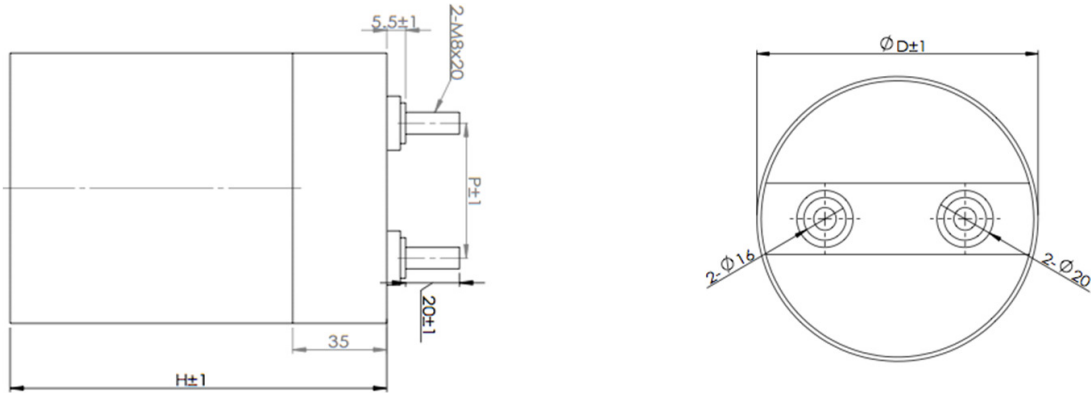
EX: USM53-127J500B175SPA

USM53	-	127	J	500	#	175	#	#
⋮		⋮	⋮	⋮	⋮	⋮	⋮	⋮
Series	Capacitance	Tolerance	Voltage	Terminal Style	H	Mounting	PA	
	107=100.0μF	J=±5%	Urms	A= M8 Male	Height	C=Clamping	PA: Al.Case	
	108=1000.0μF	K=±10%	VAC	B=M6 Female	See Dimension	S= Stud M12		

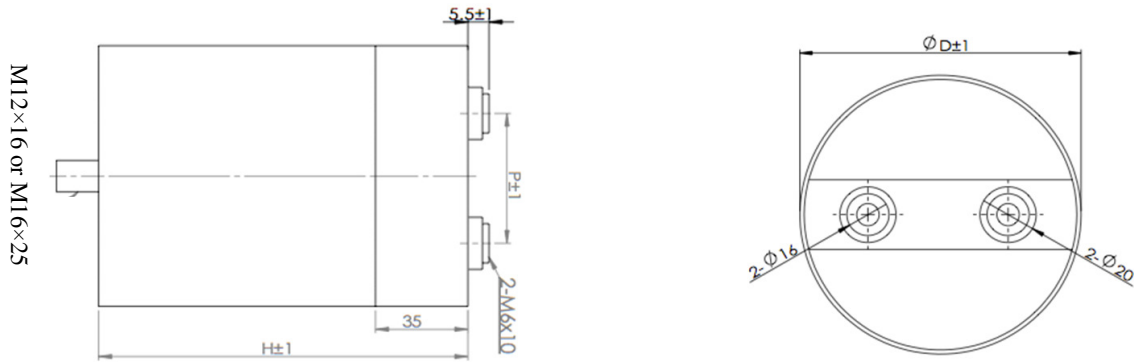
Terminal Style A : M8 Male Screw; Mounting Style S: M12 ×16 or M16 ×25(ΦD=126,136)



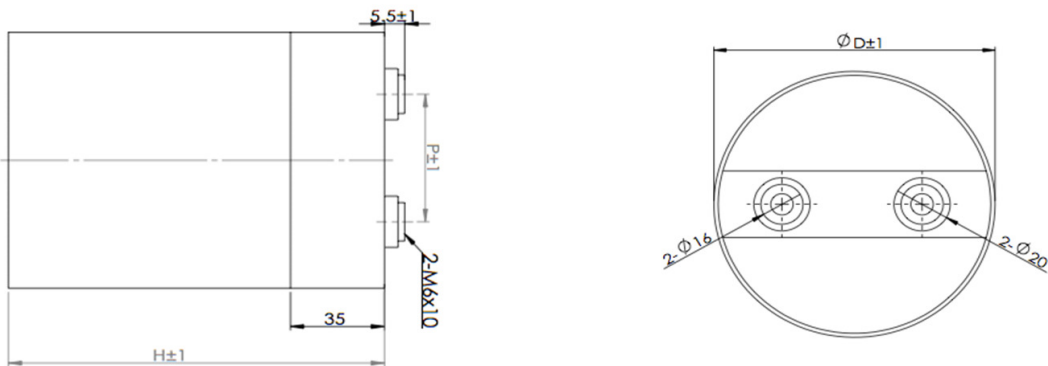
Terminal Style A : M8 Male Screw; Mounting Style C: Clamping



Terminal Style B : M6 Female Screw; Mounting Style S: M12 ×16 or M16 ×25(ΦD=126,136)



Terminal Style B : M6 Female Screw; Mounting Style C: Clamping



◆Electrical Characteristics

USM53 Series

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Part Number	Cn	Urms	UTC	ESL	ESR	Irms	dv/dt	I peak	Dimension (mm)		
	μF	Vac	Vac	nH	mΩ	Max.	V/μs	Amps	ΦD	H	P
Urms : 500VAC, U _{TT} : 750VAC or 1075VDC											
USM53-806J500#125#PA	80	500	4000	50	1.2	40 A	50	4000	86	125	32
USM53-127J500#175#PA	120	500	4000	65	1.6	50 A	40	4800	86	175	32
USM53-157J500#125#PA	150	500	4000	50	1.5	55 A	50	7500	116	125	50
USM53-247J500#175#PA	240	500	4000	65	2.0	80 A	40	9600	116	175	50
Urms : 690VAC, U _{TT} : 1035VAC or 1500VDC											
USM53-306J690#95#PA	30	690	4000	50	3.0	30 A	50	1500	86	95	32
USM53-606J690#175#PA	60	690	4000	65	1.5	50 A	50	3000	86	175	32
USM53-506J690#100#PA	50	690	4000	50	2.2	45 A	50	2500	116	100	50
USM53-107J690#175#PA	100	690	4000	65	1.2	70 A	50	5000	116	175	50
Urms : 780VAC, U _{TT} : 1170VAC or 1680VDC											
USM53-226J780#95#PA	22	780	4000	50	3.2	30 A	60	1320	86	95	32
USM53-456J780#175#PA	45	780	4000	65	1.6	50 A	60	2700	86	175	32
USM53-436J780#100#PA	43	780	4000	50	2.3	45 A	60	2580	116	100	50
USM53-856J780#175#PA	85	780	4000	65	1.2	70 A	60	5100	116	175	50
Urms : 850VAC, U _{TT} : 1275VAC or 1850VDC											
USM53-186J850#95#PA	18	850	4000	50	3.4	25 A	70	1260	86	95	32
USM53-356J850#175#PA	35	850	4000	65	1.6	45 A	70	2450	86	175	32
USM53-346J850#100#PA	34	850	4000	50	2.4	40 A	70	2380	116	100	50
USM53-706J850#175#PA	70	850	4000	65	1.2	60 A	70	4900	116	175	50
Urms : 1000VAC, U _{TT} : 1500VAC or 2200VDC											
USM53-186J1000#125#PA	18	1000	4000	70	4.0	25 A	80	1440	86	125	32
USM53-356J1000#225#PA	35	1000	4000	80	2.0	45 A	80	2800	86	225	32
USM53-326J1000#125#PA	32	1000	4000	70	3.0	40 A	80	2560	116	125	50
USM53-656J1000#225#PA	65	1000	4000	80	1.5	60 A	80	5200	116	225	50
Urms : 1200VAC, U _{TT} : 1800VAC or 2600VDC											
USM53-126J1200#125#PA	12	1200	4000	70	4.2	25 A	90	1080	86	125	32
USM53-256J1200#225#PA	25	1200	4000	80	2.2	45 A	90	2250	86	225	32
USM53-256J1200#125#PA	25	1200	4000	70	3.2	40 A	90	2250	116	125	50
USM53-506J1200#225#PA	50	1200	4000	80	1.6	60 A	90	4500	116	225	50
Urms : 1500VAC, U _{TT} : 2250VAC or 3300VDC											
USM53-805J1500#125#PA	8	1500	4000	70	4.8	20 A	100	800	86	125	32
USM53-176J1500#225#PA	17	1500	4000	80	2.5	38 A	100	1700	86	225	32
USM53-156J1500#125#PA	15	1500	4000	70	3.5	35 A	100	1500	116	125	50
USM53-306J1500#225#PA	30	1500	4000	80	1.8	55 A	100	3000	116	225	50

*Other capacitance , voltage and dimensions are available on request.

ΔVersion: 2016-1.0