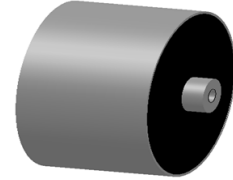


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Protect IGBT/IGCT/GTO/SCR Components, High voltage

❖General Description

Standard Reference	IEC 61071
Climatic Category	40 / 85 / 56
Max . Altitude	2000 m
Dielectric Material	Self-Healing Metallized Polypropylene
Case Type)	Polyester tape or Plastic Case,Resin filled,UL94V-0
Terminals Type	Male or Female screw terminals
Capacitance Range	Cn: 0.01 μ F ~ 20 μ F (1kHz , 20 $^{\circ}$ C)
Capacitance Tolerance	J (\pm 5%), K(\pm 10%)
Dielectric Dissipation Factor	Dielectric Dissipation Factor (tg δ): 0.0002 (1kHz , 20 $^{\circ}$ C)
Insulation Resistance	IR \times Cn : \geq 10000s (100Vdc, 60s, 20 $^{\circ}$ C)
Rated Voltage	Un : 500VDC ~ 20000VDC
Test voltage UTT	UTT: 1.4Un (10s , 20 $^{\circ}$ C) – Test voltage between both terminals
Test voltage UTC	UTC: 3000Vac (10s , 20 $^{\circ}$ C) –Test voltage between terminals with case
	1.1 \times Un : 30% of on-load duration
	1.15 \times Un : 30 min/day
Maximum Over Voltage	1.2 \times Un : 5 min/day
	1.3 \times Un : 1 min/day
	1.5 \times Un : 30 ms/time, 1000 times during the life of the capacitor
Operating Temperature	- 40 $^{\circ}$ C ~ +85 $^{\circ}$ C
Storage Temperature	- 40 $^{\circ}$ C ~ +85 $^{\circ}$ C
Lifetime Expectancy	100,000 hours (Un , 70 $^{\circ}$ C),30,000 hours (Urms , 70 $^{\circ}$ C)
Max. Torque of terminals	M6 Female screw: 3.5 Nm , M8 Female screw: 5.0 Nm
Applications	R.C. Snubber Circuit, Protect IGCT/GTO/SCR, High voltage
Remarks	RoHs Compliant on request. Add "R" to p/n.
	*Other capacitance, voltage and dimensions are available on request



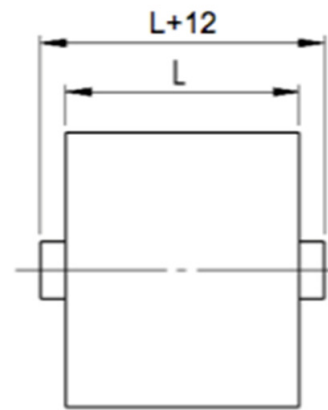
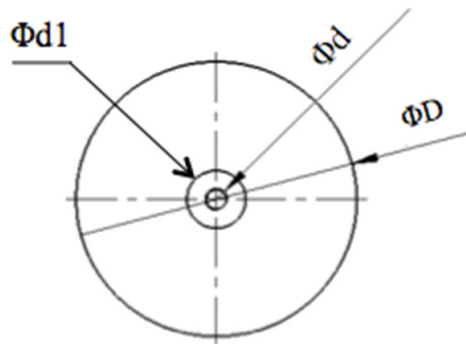
❖Part Number System

EX: USM98-105J3000DB78

USM98	-	105		J		3000		D		B		78
:		:		:		:		:		:		:
Series		Capacitance		Tolerance		Voltage		Voltage type		Style		L
		105=1.0 μ F		J= \pm 5%		Un or Urms		D= Vdc,Un		B=M6/M8		Length
		106=10.0 μ F		K= \pm 10%		Vdc or Vac		R= Vac, Urms		Female Screw		

Style B: Female Screw (Output : M6 or M8)

Unit: mm

M6: $\Phi d1 = \Phi 15$ M8: $\Phi d1 = \Phi 20$ 

❖ Electrical Characteristics *Other capacitance , voltage are available on request. ΔVersion: 2016-1.0

Part Number	Cn	Un	Vrms	ESL	Irms	dv/dt	I peak	Dimension (mm)		
	μF	Vdc	Vac	nH	Max.	V/μs	Amps	ΦD	L	Φd
Un :3000VDC , Urms : 1200VAC, UTT : 4500VDC										
USM98-105J3000DB78	1.0	3000	1200	25	20A	600	600	36	78	M6*10
USM98-205J3000DB78	2.0	3000	1200	25	25A	600	1200	50	78	M6*10
USM98-305J3000DB78	3.0	3000	1200	25	30A	600	1800	60	78	M6*10
USM98-405J3000DB78	4.0	3000	1200	25	40A	600	2400	70	78	M6*10
USM98-505J3000DB78	5.0	3000	1200	25	50A	600	3000	78	78	M6*10
USM98-605J3000DB78	6.0	3000	1200	25	60A	600	3600	84	78	M8*10
USM98-705J3000DB78	7.0	3000	1200	25	70A	600	4200	90	78	M8*10
USM98-805J3000DB78	8.0	3000	1200	25	75A	600	4800	96	78	M8*10
USM98-905J3000DB78	9.0	3000	1200	25	80A	600	5400	102	78	M8*10
USM98-106J3000DB78	10	3000	1200	25	80A	600	6000	108	78	M8*10
USM98-126J3000DB78	12	3000	1200	25	90A	600	7200	118	78	M8*10
USM98-146J3000DB78	14	3000	1200	25	100A	600	8400	128	78	M8*10
Un :4000VDC , Urms : 1500VAC, UTT : 5600VDC										
USM98-105J4000DB78	1.0	4000	1500	25	20A	800	800	42	78	M6*10
USM98-205J4000DB78	2.0	4000	1500	25	30A	800	1600	58	78	M6*10
USM98-305J4000DB78	3.0	4000	1500	25	40A	800	2400	70	78	M6*10
USM98-405J4000DB78	4.0	4000	1500	25	45A	800	3200	81	78	M6*10
USM98-455J4000DB78	4.5	4000	1500	25	50A	800	3600	86	78	M8*10
USM98-505J4000DB78	5.0	4000	1500	25	60A	800	4000	90	78	M8*10
USM98-605J4000DB78	6.0	4000	1500	25	70A	800	4800	98	78	M8*10
USM98-705J4000DB78	7.0	4000	1500	25	75A	800	5600	105	78	M8*10
USM98-805J4000DB78	8.0	4000	1500	25	80A	800	6400	113	78	M8*10
USM98-905J4000DB78	9.0	4000	1500	25	85A	800	7200	120	78	M8*10
USM98-106J4000DB78	10.0	4000	1500	25	90A	800	8000	126	78	M8*10

❖Electrical Characteristics

USM98 Series

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Part Number	Cn	Un	Vrms	ESL	Irms	dv/dt	I peak	Dimension (mm)		
	µF	Vdc	Vac	nH	Max.	V/µs	Amps	ΦD	L	Φd
Un : 6000VDC , Urms : 1900VAC, UTT : 8500VDC										
USM98-684J6000DB78	0.68	6000	1900	60	25A	1000	680	50	78	M6*10
USM98-105J6000DB78	1.0	6000	1900	60	30A	1000	1000	60	78	M6*10
USM98-155J6000DB78	1.5	6000	1900	60	35A	1000	1500	72	78	M6*10
USM98-205J6000DB78	2.0	6000	1900	60	40A	1000	2000	82	78	M6*10
USM98-255J6000DB78	2.5	6000	1900	60	50A	1000	2500	92	78	M8*10
USM98-305J6000DB78	3.0	6000	1900	60	55A	1000	3000	100	78	M8*10
USM98-355J6000DB78	3.5	6000	1900	60	60A	1000	3500	108	78	M8*10
USM98-405J6000DB78	4.0	6000	1900	60	65A	1000	4000	116	78	M8*10
USM98-455J6000DB78	4.5	6000	1900	60	70A	1000	4500	122	78	M8*10
USM98-505J6000DB78	5.0	6000	1900	60	75A	1000	5000	128	78	M8*10
Un : 7000VDC , Urms : 2300VAC, UTT : 9800VDC										
USM98-105J7000DB78	1.0	7000	2300	60	30A	1500	1500	60	115	M6*10
USM98-205J7000DB78	2.0	7000	2300	60	55A	1500	3000	97	115	M8*10
USM98-305J7000DB78	3.0	7000	2300	60	65A	1500	4500	100	115	M8*10
USM98-405J7000DB78	4.0	7000	2300	60	70A	1500	6000	116	115	M8*10
USM98-505J7000DB78	5.0	7000	2300	60	80A	1500	7500	130	115	M8*10
Un : 8000VDC , Urms : 2700VAC, UTT : 11200VDC										
USM98-105J8000DB78	1.0	8000	2700	60	35A	1800	1800	70	115	M6*10
USM98-155J8000DB78	1.5	8000	2700	60	50A	1800	2700	85	115	M8*10
USM98-205J8000DB78	2.0	8000	2700	60	60A	1800	3600	97	115	M8*10
USM98-255J8000DB78	2.5	8000	2700	60	70A	1800	4500	108	115	M8*10
USM98-305J8000DB78	3.0	8000	2700	60	75A	1800	5400	118	115	M8*10
Un : 10000VDC , Urms : 3000VAC, UTT : 14000VDC										
USM98-105J10000DB78	1.0	10000	3000	60	35A	2000	2000	78	115	M6*10
USM98-125J10000DB78	1.2	10000	3000	60	40A	2000	2400	85	115	M8*10
USM98-155J10000DB78	1.5	10000	3000	60	50A	2000	3000	96	115	M8*10
USM98-205J10000DB78	2.0	10000	3000	60	60A	2000	4000	110	115	M8*10
USM98-255J10000DB78	2.5	10000	3000	60	70A	2000	5000	121	115	M8*10
Un : 11000VDC , Urms : 3500VAC, UTT : 15400VDC										
USM98-684J11000DB78	0.68	11000	3500	60	35A	2200	1496	75	115	M6*10
USM98-105J11000DB78	1.0	11000	3500	60	40A	2200	2200	90	115	M8*10
USM98-125J11000DB78	1.2	11000	3500	60	50A	2200	2640	95	115	M8*10
USM98-155J11000DB78	1.5	11000	3500	60	60A	2200	3300	108	115	M8*10
USM98-205J11000DB78	2.0	11000	3500	60	65A	2200	4400	124	115	M8*10
Un : 12000VDC , Urms : 3800VAC, UTT : 16800VDC										
USM98-504J12000DB78	0.5	12000	3800	60	30A	2500	1250	70	115	M6*10
USM98-684J12000DB78	0.68	12000	3800	60	40A	2500	1700	82	115	M8*10
USM98-105J12000DB78	1.0	12000	3800	60	50A	2500	2500	98	115	M8*10
USM98-155J12000DB78	1.5	12000	3800	60	55A	2500	3750	120	115	M8*10
USM98-185J12000DB78	1.8	12000	3800	60	60A	2500	4500	130	115	M8*10