

Leads:

## **GENERAL TECHNICAL CHARACTERISTICS**

Reference standards : IEC 61071-60068
Dielectric : Polypropylene film

Construction: Extended double side metallized carrier film with internal

series connection and metallized film

Coating: Solvent resistant plastic case. Dry construction

Flammability class UL94V-0 Tinned copper lugs for screw fixing

or soldering on PCBS

## **ELECTRICAL CHARACTERISTICS**

Operating temperature range :  $-40 \text{ to} + 105 \text{ ^{\circ}C} \quad \text{(case)}$  Capacitance :  $0.047 \text{ to} \ 10 \mu \text{F}$ 

Rated Voltage : 700 to 3000 VDC
Tolerance : ± 5% , ± 10%

Dissipation factor: ≤6×10<sup>-4</sup> Measured at 1000±20 Hz

and 20±5°C

Life expectancy : 100,000 hours at Un and 70  $^{\circ}$ C

(Hotspot temperature)

## **TEST METHODS AND PERFORMANCES**

Dielectric strength: 1.5Un (DC) applied to 10s at 20±5°C

Test voltage terminal to case : 3KVAC/50Hz for 60s

Insulation resistance : 30000s but need not exceed  $30G\Omega$ 

(typical value), after 1 minute of electrification at 100VDC ( $20\pm5^{\circ}C$ )

## **ORDERING CODE**

Please refer to Page 10, item A

Electrical specifications, ordering codes

P1	1=0.8 Tell 1=0.8
	¥
<u>L±1</u>	- B±1 →

Lug terminal type, (refer to Page 7-9)

B. K. U. C. UF. CF. R. G. T. TF. E. D. N. L available

Custom design available upon request

Ordering Code Cap (µF)	Сар		Dimension(r	nm)	du/dt	lpeak	Ls	Irms@60°C	ESR@10kHz
	L	В	Н	(v/µs)	(A)	(nH)	@10kHz (A)	(mΩ)	
Un 700VDC , Urms 380VA	AC , Us 1050V								
STM-700-1.0-&P#	1.0	42.5	24.5	27.5	325	325	25	15.0	3.2
STM-700-1.2-&P#	1.2	42.5	24.5	27.5	325	390	25	16.0	3.1
STM-700-1.5-&S#	1.5	42.5	22.0	30.0	325	487	25	18.0	2.8
STM-700-2.0-&P#	2.0	42.5	33.5	35.5	325	650	25	22.0	2.5
STM-700-2.0-&S#	2.0	42.5	28.0	37.0	325	650	25	21.5	2.5
STM-700-2.2-&P#	2.2	42.5	33.5	35.5	325	715	25	22.5	2.4
STM-700-2.2-&S#	2.2	42.5	28.0	37.0	325	715	25	22.0	2.4
STM-700-2.5-&P#	2.5	42.5	33.5	35.5	325	812	25	23.0	2.2
STM-700-2.5-&S#	2.5	42.5	28.0	37.0	325	812	25	22.5	2.2
STM-700-3.0-&P#	3.0	42.5	33.0	45.0	325	975	25	26.0	2.1
STM-700-3.0-&S#	3.0	42.5	30.0	45.0	325	975	25	25.5	2.1
STM-700-3.3-&P#	3.3	42.5	33.0	45.0	325	1072	25	26.5	2.1
STM-700-3.3-&S#	3.3	42.5	30.0	45.0	325	1072	25	26.0	2.1
STM-700-3.5-&P#	3.5	42.5	33.0	45.0	325	1134	25	27.0	2.0
STM-700-3.5-&S#	3.5	42.5	30.0	45.0	325	1134	25	26.5	2.0
STM-700-4.0-&P#	4.0	57.5	30.0	45.0	220	880	35	27.0	2.3
STM-700-4.0-&S#	4.0	42.5	33.0	45.0	325	1300	35	32.0	1.8
STM-700-4.7-&P#	4.7	57.5	35.0	50.0	220	1034	35	31.0	2.1
STM-700-4.7-&S#	4.7	57.5	30.0	45.0	220	1034	35	30.5	2.1
STM-700-5.0-&P#	5.0	57.5	35.0	50.0	220	1100	35	31.0	2.1
STM-700-5.0-&S#	5.0	57.5	30.0	45.0	220	1100	35	30.5	2.1
STM-700-5.6-&P#	5.6	57.5	35.0	50.0	220	1232	35	32.0	2.0
STM-700-6.8-&S#	6.8	57.5	35.0	50.0	220	1496	35	32.0	2.0
STM-700-10.0-&S#	10.0	57.5	42.5	56.0	220	2200	35	33.0	1.3



Electrical specifications, ordering codes

Ordering Code	Сар	Dimension(mm)			du/dt	lpeak	Ls	Irms@60°C	ESR@10kHz
	(μF)	L	В	Н	(v/µs)	(A)	(nH)	@10kHz (A)	(mΩ)
Un 850VDC , Urms 450VA	C , Us 1275V								
STM-850-0.82-&P#	0.82	42.5	24.5	27.5	400	328	25	15.5	3.1
STM-850-1.0-&P#	1.0	42.5	24.5	27.5	400	400	25	17.5	2.7
STM-850-1.0-&S#	1.0	42.5	22.0	30.0	400	400	25	17.0	2.7
STM-850-1.5-&P#	1.5	42.5	33.5	35.5	400	600	25	23.0	2.2
STM-850-1.5-&S#	1.5	42.5	28.0	37.0	400	600	25	22.5	2.2
STM-850-2.0-&P#	2.0	42.5	33.5	35.5	400	800	25	23.5	2.2
STM-850-2.2-&P#	2.2	42.5	30.0	45.0	400	880	25	26.5	2.0
STM-850-2.5-&P#	2.5	42.5	33.0	45.0	400	1000	25	27.0	2.0
STM-850-2.5-&S#	2.5	42.5	30.0	45.0	400	1000	25	26.5	2.0
STM-850-3.0-&P#	3.0	57.5	30.0	45.0	280	840	35	28.0	1.9
STM-850-3.3-&P#	3.3	57.5	30.0	45.0	280	924	35	28.5	2.2
STM-850-4.0-&P#	4.0	57.5	35.0	50.0	280	1120	35	29.5	2.1
STM-850-4.7-&P#	4.7	57.5	35.0	50.0	280	1316	35	32.0	1.9
STM-850-6.8-&S#	6.8	57.5	42.5	56.0	280	1904	35	33.0	1.5
Jn 1000VDC , Urms 480V	AC , Us 1500V								
STM-1000-0.68-&P#	0.68	42.5	24.5	27.5	500	340	25	15.0	3.3
STM-1000-0.75-&P#	0.75	42.5	24.5	27.5	500	375	25	15.5	3.2
STM-1000-0.75-&S#	0.75	42.5	22.0	30.0	500	375	25	15.0	3.2
STM-1000-1.0-&S#	1.0	42.5	28.0	37.0	500	500	25	17.0	2.9
STM-1000-1.2-&P#	1.2	42.5	33.5	35.5	500	600	25	22.0	2.5
STM-1000-1.2-&S#	1.2	42.5	28.0	37.0	500	600	25	21.5	2.5
STM-1000-1.5-&P#	1.5	42.5	33.5	35.5	500	750	25	23.5	2.2
STM-1000-1.75-&P#	1.75	42.5	33.0	45.0	500	875	25	23.5	2.1
STM-1000-1.75-&S#	1.75	42.5	30.0	45.0	500	875	25	23.0	2.1
STM-1000-2.0-&P#	2.0	42.5	33.0	45.0	500	1000	25	26.5	2.0
STM-1000-2.2-&P#	2.2	57.5	30.0	45.0	350	770	35	26.5	2.5
STM-1000-2.5-&S#	2.5	57.5	30.0	45.0	350	875	35	28.0	2.1
STM-1000-3.0-&P#	3.0	57.5	35.0	50.0	350	1050	35	31.0	2.1
STM-1000-3.3-&P#	3.3	57.5	35.0	50.0	350	1155	35	31.0	2.0
STM-1000-5.0-&S#	5.0	57.5	42.5	56.0	350	1750	35	33.0	1.6
Jn 1200VDC , Urms 500V		01.0	12.0	00.0	000	1100		00.0	1.0
STM-1200-0.22-&P#	0.22	42.5	24.5	27.5	650	143	25	11.5	5.2
STM-1200-0.22-&S#	0.22	42.5	15.0	26.0	650	143	25	11.0	5.2
STM-1200-0.33-&P#	0.33	42.5	24.5	27.5	650	210	25	12.0	5.1
STM-1200-0.33-&S#	0.33	42.5	15.0	26.0	650	210	25	11.5	5.1
STM-1200-0.39-&P#	0.39	42.5	24.5	27.5	650	254	25 25	13.0	4.6
STM-1200-0.39-&S#	0.39	42.5	17.0	28.0	650	254	25	12.5	4.6
STM-1200-0.47-&P#	0.47	42.5	24.5	27.5	650	308	25	14.0	4.1
STM-1200-0.47-&S#	0.47	42.5	22.0	30.0	650	308	25	13.5	4.1
STM-1200-0.56-&S#	0.56	42.5	22.0	30.0	650	364	25	14.0	3.7
STM-1200-0.56-&P#	0.56	42.5	24.5	27.5	650	364	25	14.5	3.7
STM-1200-0.68-&P#	0.68	42.5	33.5	35.5	650	442	25	19.0	3.3
STM-1200-0.68-&S#	0.68	42.5	22.0	30.0	650	442	25	18.5	3.3
STM-1200-0.82-&P#	0.82	42.5	33.5	35.5	650	533	25	20.0	3.0
STM-1200-0.82-&S#	0.82	42.5	28.0	37.0	650	533	25	19.5	3.0
STM-1200-1.0-&P#	1.0	42.5	33.5	35.5	650	650	25	20.5	2.7
STM-1200-1.0-&S#	1.0	42.5	28.0	37.0	650	650	25	20.0	2.7
STM-1200-1.2-&P#	1.2	42.5	33.0	45.0	650	780	25	23.5	2.4



Electrical specifications, ordering codes

Ordering Code Un 1200VDC , Urms 500V	(µF)	L	В	Н	(v/µs)	(A)	(nH)	@10kHz (A)	(mΩ)
Un 1200VDC , Urms 500V					(-/ /	(* ')	(1111)	(A)	(11122)
•	/AC , Us 1800V								
STM-1200-1.2-&S#	1.2	42.5	30.0	45.0	650	780	25	23.0	2.4
STM-1200-1.5-&P#	1.5	42.5	33.0	45.0	650	975	25	25.0	2.1
STM-1200-1.5-&S#	1.5	42.5	30.0	45.0	650	975	25	24.5	2.1
STM-1200-2.0-&P#	2.0	57.5	30.0	45.0	455	910	35	27.0	1.7
STM-1200-2.2-&P#	2.2	57.5	35.0	50.0	455	1001	35	30.0	2.4
STM-1200-2.2-&S#	2.2	57.5	30.0	50.0	455	1001	35	29.5	2.4
STM-1200-2.5-&P#	2.5	57.5	35.0	50.0	455	1138	35	31.0	2.3
STM-1200-3.0-&P#	3.0	57.5	35.0	50.0	455	1365	35	32.0	2.1
STM-1200-4.5-&S#	4.5	57.5	42.5	56.0	455	2047	35	33.0	1.7
Un 1500VDC , Urms 570V	/AC . Us 2250V								
STM-1500-0.33-&P#	0.33	42.5	24.5	27.5	800	264	25	13.5	4.6
STM-1500-0.39-&S#	0.39	42.5	22.0	30.0	800	312	25	13.5	4.3
STM-1500-0.39-&3# STM-1500-0.47-&P#	0.47	42.5	33.5	35.5	800	376	25	18.0	3.7
STM-1500-0.47-&F#	0.47	42.5	28.0	37.0	800	376	25	17.5	3.7
STM-1500-0.47-&3#	0.68	42.5	33.5	35.5	800	544	25	19.5	3.1
STM-1500-0.68-&S#	0.68	42.5	28.0	37.0	800	544	25	19.0	3.1
STM-1500-0.75-&P#	0.75	42.5	33.5	35.5	800	600	25	20.5	2.8
STM-1500-0.75-&F#	1.0	42.5	33.0	45.0	800	800	25	23.0	2.5
STM-1500-1.0-&S#	1.0	42.5	30.0	45.0	800	800	25	22.5	2.5
STM-1500-1.0-&5# STM-1500-1.2-&P#	1.2	57.5	30.0	45.0	560	672	35	25.0	2.8
STM-1500-1.5-&P#	1.5	57.5	35.0	50.0	560	840	35	28.0	2.5
STM-1500-1.8-&P#	1.8	57.5	35.0	50.0	560	1008	35	29.5	2.3
STM-1500-1.5-&F#	2.5	57.5	42.5	56.0	560	1400	35	31.0	1.8
Un 1700VDC , Urms 575V		01.0	42.0	00.0	000	1400		01.0	1.0
STM-1700-0.22-&P#	0.22	42.5	24.5	27.5	880	194	25	13.2	5.3
STM-1700-0.22-&F#	0.22	42.5	17.0	28.0	880	194	25	13.0	5.3
STM-1700-0.22-&3#	0.33	42.5	24.5	27.5	880	290	25	14.0	5.0
STM-1700-0.33-&S#	0.33	42.5	22.0	30.0	880	290	25	13.5	5.0
STM-1700-0.33-&3# STM-1700-0.47-&P#	0.47	42.5	33.5	35.5	880	413	25	19.0	3.8
STM-1700-0.47-&F#	0.47	42.5	28.0	37.0	880	413	25	18.5	3.8
STM-1700-0.47-&3#	0.47	42.5	33.5	35.5	880	492	25	19.5	3.0
STM-1700-0.56-&S#	0.56	42.5	28.0	37.0	880	492	25	19.0	3.1
STM-1700-0.50-&3# STM-1700-0.68-&P#	0.68	42.5	33.5	35.5	880	598	25	20.0	2.9
STM-1700-0.82-&P#	0.82	42.5	33.0	45.0	880	721	25	22.1	2.5
STM-1700-0.82-&F#	0.82	42.5	30.0	45.0	880	721	25	19.5	2.5
STM-1700-0.02-&3#	1.0	57.5	30.0	45.0	610	610	35	23.5	2.7
STM-1700-1.0-&P#	1.2	57.5	30.0	45.0	610	732	35	26.2	2.6
STM-1700-1.2-&P#	1.5	57.5	35.0	50.0	610	915	35	28.5	2.4
STM-1700-1.5-&F#	2.2	57.5	42.5	56.0	610	1342	35	30.0	1.8
Un 2000VDC , Urms 630V		31.3	74.0	50.0	010	IUTZ	JJ	30.0	1.0
<u> </u>	*	42.5	24.5	27.5	1000	100	25	8.0	13.0
STM-2000-0.10-&P#	0.10		15.0	26.0	1000	100			13.0
STM-2000-0.10-&S#	0.10	42.5 42.5	24.5	27.5	1000		25 25	7.5 10.5	7.5
STM-2000-0.15-&P#	0.15 0.15	42.5	24.5 17.0	28.0	1000	150 150	25 25	10.5	7.5 7.5
STM-2000-0.15-&S#	0.15 0.22	42.5 42.5	24.5	27.5		220			7.5 5.1
STM-2000-0.22-&P#	0.22	42.5 42.5	22.0	30.0	1000 1000	220	25 25	12.0 11.5	5.1 5.1
STM-2000-0.22-&S#							25 25	•••	
STM-2000-0.33-&P#	0.33	42.5	33.5	35.5	1000	330		16.5	4.1
STM-2000-0.33-&S#	0.33	42.5 42.5	28.0	37.0	1000	330	25	16.0 17.5	4.1
STM-2000-0.39-&P#	0.39	42.5	33.5	35.5	1000	390	25	17.5	3.6
STM-2000-0.39-&S#	0.39	42.5	28.0	37.0	1000	390	25	17.0	3.6



Electrical specifications, ordering codes

Ordering Code	Cap	Dimension(mm)			du/dt	lpeak	Ls	Irms@60°C	ESR@10kHz
	(μ <b>F</b> )	L	В	Н	(v/µs)	(A)	(nH)	@10kHz (A)	(mΩ)
Un 2000VDC , Urms 630V/	AC , Us 3000V								
STM-2000-0.47-&S#	0.47	42.5	28.0	37.0	1000	470	25	20.0	3.2
STM-2000-0.56-&P#	0.56	42.5	33.0	45.0	1000	560	25	21.5	3.0
STM-2000-0.68-&P#	0.68	57.5	30.0	45.0	700	476	35	22.5	3.5
STM-2000-0.82-&P#	0.82	57.5	30.0	45.0	700	574	35	24.0	3.1
STM-2000-1.0-&P#	1.0	57.5	35.0	50.0	700	700	35	27.0	2.8
STM-2000-1.2-&P#	1.2	57.5	35.0	50.0	700	840	35	29.0	2.4
STM-2000-1.8-&S#	1.8	57.5	42.5	56.0	700	1260	35	31.0	2.0
Un 2500VDC , Urms 700V/	AC , Us 3750V								
STM-2500-0.10-&P#	0.10	42.5	24.5	27.5	1350	135	25	9.0	11.2
STM-2500-0.15-&S#	0.15	42.5	22.0	30.0	1350	202	25	10.5	7.2
STM-2500-0.22-&S#	0.22	42.5	28.0	37.0	1350	297	25	14.5	5.2
STM-2500-0.33-&S#	0.33	42.5	33.0	45.0	1350	445	25	18.0	3.8
STM-2500-0.47-&S#	0.47	57.5	30	45.0	945	444	35	22.0	3.4
STM-2500-0.56-&P#	0.56	57.5	30.0	45.0	945	530	35	22.5	3.5
STM-2500-0.68-&P#	0.68	57.5	35.0	50.0	945	642	35	25.0	3.2
STM-2500-0.75-&P#	0.75	57.5	35.0	50.0	945	709	35	25.5	3.1
STM-2500-1.0-&S#	1.0	57.5	42.5	56.0	945	945	35	28.0	2.8
Un 3000VDC , Urms 750V/	AC , Us 4500V								
STM-3000-0.047-&P#	0.047	42.5	24.5	27.5	1600	75	25	7.4	17.0
STM-3000-0.047-&S#	0.047	42.5	15.0	26.0	1600	75	25	7.0	17.0
STM-3000-0.068-&P#	0.068	42.5	24.5	27.5	1600	108	25	9.0	12.0
STM-3000-0.068-&S#	0.068	42.5	17.0	28.0	1600	108	25	8.5	12.0
STM-3000-0.10-&P#	0.10	42.5	33.5	35.5	1600	160	25	12.0	8.5
STM-3000-0.10-&S#	0.10	42.5	22.0	30.0	1600	160	25	11.5	8.5
STM-3000-0.15-&P#	0.15	42.5	33.5	35.5	1600	240	25	14.5	6.1
STM-3000-0.15-&S#	0.15	42.5	28.0	37.0	1600	240	25	14.0	6.1
STM-3000-0.22-&P#	0.22	42.5	33.0	45.0	1600	352	25	17.6	1.3
STM-3000-0.22-&S#	0.22	42.5	30.0	45.0	1600	352	25	17.0	1.3
STM-3000-0.33-&P#	0.33	57.5	30.0	45.0	870	288	35	21.0	4.2
STM-3000-0.47-&P#	0.47	57.5	35.0	50.0	870	408	35	23.0	3.9
STM-3000-0.56-&S#	0.56	57.5	35.0	50.0	870	487	35	23.0	3.8
STM-3000-0.82-&S#	0.82	57.5	42.5	56.0	870	714	35	26.0	3.0