ELECTRONIC FILM CAPACITORS, INC.

SP1213

METALLIZED POLYPROPYLENE

HI-TECH CAPACITOR TECHNOLOGY MEETS THE DEMAND OF TODAY'S HI-TECH SWITCH-MODE POWER SUPPLIES

EFC Series SP1213 are metallized polypropylene capacitors in a wrap and fill construction. Special metallization and high-tech terminations allow these capacitors to operate at up to 30 Amps ripple current at frequencies up to 100 kHz. **SP1213** exhibit little or no capacitance rolloff, when compared to electrolytics, at these high frequencies.

SPECIFICATIONS

1. TEMPERATURE RANGE:
   -55°C to +85°C at full voltage ratings.
   To 105°C with 25% voltage derating.

2. CAPACITANCE TOLERANCES:
   ± 1%, 2%, 5%, 10%, 20%.

3. DISSIPATION FACTOR (1 kHz):
   0.1% maximum when measured at 25°C.

4. INSULATION RESISTANCE:
   150,000 Megohm-Microfarads (need not exceed 300,000 Megohms) when measured at rated voltage at 25°C.

5. ESR:
   See Dimensions and Ratings Tables.

CATALOG NOMENCLATURE

SP 1213 TC Q - 3 - 1.0 - 2 - 5

CASE CODE
TC - WRAP & FILL - ROUND - AXIAL

LEADS
OMIT FOR SOLID WIRE;
INCLUDE FOR QUICK CONNECT TERMINALS

DIELECTRIC CODE
1213 - METALLIZED POLYPROPYLENE

OPTION
SWITCH MODE POWER SUPPLY
Low ESR and high current rating. Specify with the prefix **SP**.

SIZE CODE
3 - STANDARD
X - NON-STANDARD

CAPACITANCE
IN MICROFARADS (µF)

VOLTAGE
1.6 - 160 VDC
2.5 - 250 VDC
4 - 400 VDC
6.3 - 630 VDC

TOLERANCE
1 - 1%
2 - 2%
5 - 5%
ETC.

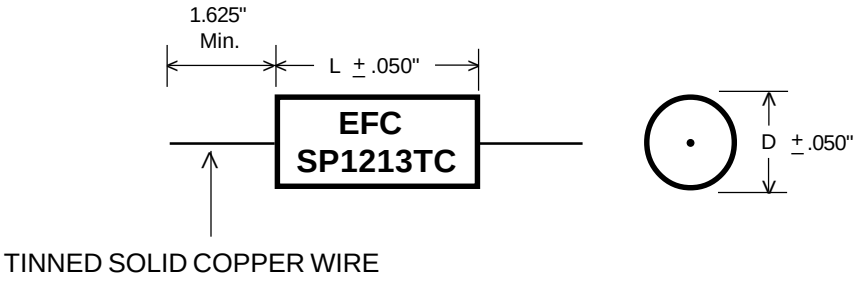
Reidville Industrial Park * 41 Interstate Lane
WATERBURY, CONNECTICUT 06705
PHONE (203) 755-5629 FAX (203) 755-0659

ELECTRONIC FILM CAPACITORS, INC.

SP1213TC

Tubular
Wrap and Fill

Snubber Capacitors
Metallized Polypropylene



DIMENSIONS and RATINGS

Cap. µF	100 VDC					200 VDC					400 VDC				
	D	L	Lead Dia.	100 kHz ESR (mΩ)	I_{RMS} (Amps)	D	L	Lead Dia.	100 kHz ESR (mΩ)	I_{RMS} (Amps)	D	L	Lead Dia.	100 kHz ESR (mΩ)	I_{RMS} (Amps)
1.0	.580	.781	.032	15	9.0	.520	1.250	.032	20	7.5	.720	1.531	.032	19	9.5
2.0	.630	.906	.032	12	11.0	.700	1.250	.032	15	12.0	.900	1.781	.040	15	15.0
3.0	.750	.906	.040	11	12.0	.750	1.531	.040	13	15.0	1.090	1.781	.040	12	15.0
5.0	.780	1.250	.040	9	14.0	.870	1.781	.040	11	15.0	1.190	2.250	.040	10	15.0
10.0	.940	1.531	.040	8	15.0	1.030	2.250	.040	9	15.0	1.700	2.250	.040	7	15.0
20.0	1.050	2.250	.040	7	15.0	1.450	2.250	.040	6	15.0					
30.0	1.250	2.250	.040	6	15.0										

NOTE:
Maximum ripple current ratings, I_{RMS}, apply at 100 kHz at 25°C.

EFC will manufacture to any non-standard value and size. Please consult factory for special requirements.

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ELECTRONIC FILM CAPACITORS, INC.

SP1213TC

METALLIZED POLYPROPYLENE SNUBBER DESIGN

850VDC/450VAC

CAP. µF	D inches (mm)	L inches (mm)	I (PEAK) amps	I (RMS) amps	ESL nH	100 kHz ESR (mΩ)	dV/dT V/µS
0.15	0.38 (9.8)	1.750 (44.5)	49	4.50	45	29	325
0.22	0.45 (11.6)	1.750 (44.5)	72	4.63	45	26	325
0.33	0.55 (14.0)	1.750 (44.5)	107	5.25	45	23	325
0.47	0.65 (16.6)	1.750 (44.5)	153	5.50	45	16	325
0.56	0.71 (18.0)	1.750 (44.5)	182	6.00	40	14	325
0.68	0.78 (19.8)	1.750 (44.5)	221	6.25	35	12	325
0.82	0.85 (21.7)	1.750 (44.5)	267	6.25	30	11	325
1.00	0.94 (23.9)	1.750 (44.5)	325	6.50	30	9	325
1.20	1.03 (26.2)	1.750 (44.5)	390	6.50	30	7	325
1.50	1.15 (29.2)	1.750 (44.5)	488	6.50	30	5	325

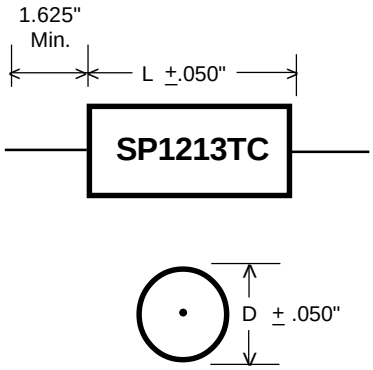
1200VDC/500VAC

CAP. µF	D inches (mm)	L inches (mm)	I (PEAK) amps	I (RMS) amps	ESL nH	100 kHz ESR (mΩ)	dV/dT V/µS
0.15	0.42 (10.8)	1.750 (44.5)	90	4.5	45	22	600
0.22	0.51 (12.9)	1.750 (44.5)	132	5.3	45	15	600
0.33	0.61 (15.7)	1.750 (44.5)	198	6.3	45	10	600
0.47	0.73 (18.6)	1.750 (44.5)	282	6.5	45	7	600
0.56	0.79 (20.2)	1.750 (44.5)	336	6.8	40	6	600
0.68	0.87 (22.2)	1.750 (44.5)	408	7.0	35	5	600
0.82	0.96 (24.4)	1.750 (44.5)	492	7.0	30	4	600
1.00	1.06 (26.8)	1.750 (44.5)	600	7.0	30	3	600
1.20	1.15 (29.4)	1.750 (44.5)	720	7.0	30	3	600
1.50	1.29 (32.8)	1.750 (44.5)	900	7.0	30	2	600

2000VDC/660VAC

CAP. µF	D inches (mm)	L inches (mm)	I (PEAK) amps	I (RMS) amps	ESL nH	100 kHz ESR (mΩ)	dV/dT V/µS
0.047	0.39 (9.9)	1.750 (44.5)	40	4.5	45	40	850
0.056	0.42 (10.7)	1.750 (44.5)	48	4.5	45	34	850
0.068	0.46 (11.7)	1.750 (44.5)	58	4.5	45	28	850
0.082	0.50 (12.7)	1.750 (44.5)	70	4.5	45	23	850
0.10	0.55 (14.0)	1.750 (44.5)	85	5.0	45	19	850
0.12	0.60 (15.2)	1.750 (44.5)	102	5.5	45	16	850
0.15	0.67 (16.9)	1.750 (44.5)	128	6.0	45	13	850
0.22	0.80 (20.4)	1.750 (44.5)	187	6.5	35	9	850
0.33	0.98 (24.9)	1.750 (44.5)	281	7.0	26	6	850
0.47	1.16 (29.6)	1.750 (44.5)	400	7.0	25	4	850
0.56	1.27 (32.3)	1.750 (44.5)	476	7.0	25	3	850

DIMENSIONS AND RATINGS



Leads - 18 AWG
Tinned Copper

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SP1213TCQ

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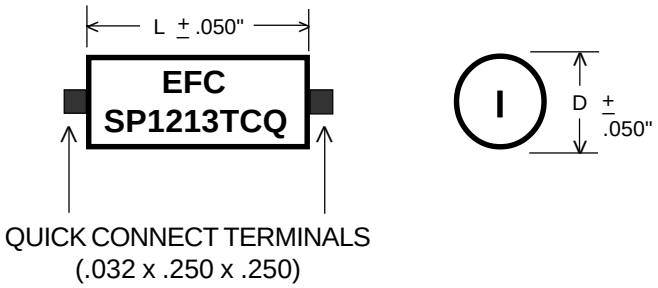
Wrap and Fill

Snubber Capacitors
Metallized Polypropylene



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