

Type 953B, Metallized Polypropylene Film Capacitors

85 °C / 85% RH, 1000h @ Vr, UL 810 Fail Safe, Rated 10,000 AFC



Type 953B radial leaded metallized polypropylene capacitors are designed for UPS systems and other AC output filtering applications. With an integrated fused metallization pattern, this product features UL 810 recognition for fail-safe operation at temperatures up to 85 °C while meeting THB 85 °C / 85% RH testing at rated voltage for challenging harsh environments.

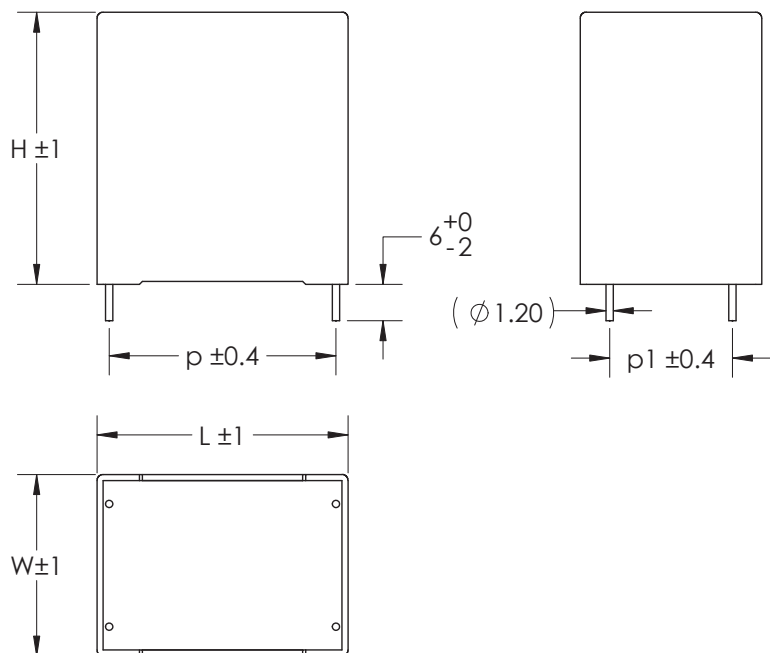
Highlights

- Fuse protection
- UL 810 recognized
- Low dissipation factor
- Self healing
- THB 85 °C / 85% RH, 1000h at rated voltage

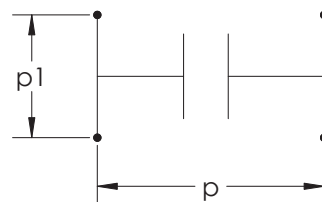
Specifications

Capacitance Range	2.5 μ F to 50 μ F
Capacitance Tolerance	± 10 % (± 5 % optional)
Rated Voltage	160 Vac, 250 Vac, 275 Vac
Operating Temperature Range	-40 °C to 85 °C
IEC Climatic Category	40/85/56 (test conditions 40 °C, 93% RH, rated voltage, 1000 hours)
THB Rating	85 °C / 85% RH - rated voltage - 1000h
Sevice Life Objective	10,000 h at rated voltage and 85 °C
Protection	UL 810 file number E71645

Dimensions



Construction Details	
Case Material	Plastic UL 94V-0
Resin Material	Dry Resin UL 94V-0
Terminal Material	Tin Plated Copper



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Part Numbering System

953B

Series

X

Voltage Code

I = 160 Vdc
Q = 250 Vdc
X = 275 Vdc

W

Cap Decimal

P = 0.
W = No Decimal
Point

2P5

Cap Rating in μF

2P5 = 2.5 μF
8 = 8 μF
25 = 25 μF

K

Tolerance

K = $\pm 10\%$
J = $\pm 5\%$

SF

Metallization
Type

SF = Segmented
Fused

-F

RoHs Compliant

Case Code	W	H	L	p	p1	d
A	20	40	41.5	37.5	10.2	1.2
B	28	37	41.5	37.5	10.2	1.2
C	24	44	41.5	37.5	10.2	1.2
D	30	45	41.5	37.5	20.3	1.2
E	30	45	57.5	52.5	20.3	1.2
F	35	50	57.5	52.5	20.3	1.2

Ratings

Part Number	Cap 1 kHz (μF)	Typ. ESR 10 kHz (m Ω)	Typ. ESL (nH)	I _{peak} (A)	dV/dt (V/ μs)	R _{th} (°C/W)	I _{rms} 10 kHz 85°C (A)	Case Code
160 VAC								
953BIW10KSF-F	10	9	30	285	29	16	8.0	A
953BIW16KSF-F	16	7	30	475	30	14	9.3	B
953BIW17P5KSF-F	17.5	7	30	570	33	13	9.6	C
953BIW25KSF-F	25	6	30	760	30	12	10.4	D
953BIW38KSF-F	38	7	38	760	20	9	11.3	E
953BIW50KSF-F	50	6	38	1045	21	8	12.2	F
250 VAC								
953BQW4P5KSF-F	4.5	12	30	190	42	16	7.1	A
953BQW7KSF-F	7	9	30	285	41	14	8.3	B
953BQW7P5KSF-F	7.5	9	30	380	51	13	8.7	C
953BQW10KSF-F	10	8	30	475	48	12	9.0	D
953BQW16P5KSF-F	16.5	8	38	475	29	9	10.3	E
953BQW22KSF-F	22	7	38	665	30	8	11.3	F
275 VAC								
953BXW2P5KSF-F	2.5	14	30	190	76	16	6.4	A
953BXW3P5KSF-F	3.5	11	30	190	54	14	7.4	B
953BXW4KSF-F	4	11	30	285	71	13	7.9	C
953BXW6KSF-F	6	8	30	380	63	12	9.0	D
953BXW9KSF-F	9	10	38	380	42	9	9.5	E
953BXW12KSF-F	12	8	38	475	40	8	10.5	F

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