

# 560P Series

Wrap-and-Fill High Temperature Polymer Film capacitors



**Film Capacitor with Metallized Polymer Dielectric  
Industry-Leading Performance at Temperatures up to +180°C**

## FEATURES

- High temperature to +180°C
- Stable Performance through Temperature/Voltage Range Rugged/Lightweight Construction
- Manufactured in U.S.

## APPLICATIONS

- Aerospace & Defense
- High Temperature Modules
- Industrial

## PHYSICAL CHARACTERISTICS

**Construction:** Non-Inductive wound metallized Polymer film

**Case:** Flame retardant tape wrap and high temperature resin end fill

**Lead Material:** 0.200 to 0.500 in. Copper clad steel  
> 0.500 in. Tinned copper wire

**Lead Strength:** Capable of withstanding a five pound pull force on lead axis

## ELECTRICAL SPECIFICATIONS

Electrical specifications	
Parameter	Value
Operating Temperature	-55°C to +150°C Up to +180°C with derating
Capacitance Range	0.1 μF to 10 μF
Capacitance Tolerance	± 10%, ± 5%
Dissipation Factor	0.05% to 0.25% When measured at 1 kHz @ 25°C
Insulation Resistance	Measured in MΩ Measured in MΩ-μF
for $C_R \leq 0.1 \mu F$	for $C_R > 0.1 \mu F$
at +25°C	25,000 MΩ-μF need not exceed 50,000 MΩ
at +85°C	20,000 MΩ-μF need not exceed 40,000 MΩ
at +125°C	3,000 MΩ-μF need not exceed 6,000 MΩ
at +150°C	900 MΩ-μF, need not exceed 1,800 MΩ

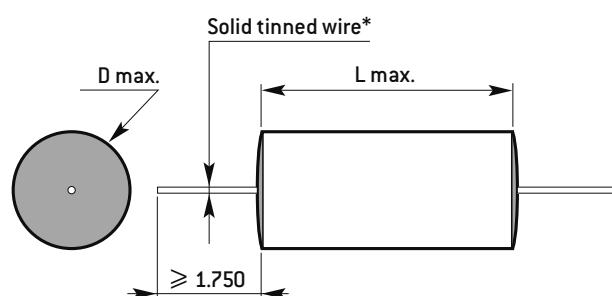
Custom configurations and extended/intermediary values available upon request.

## HOW TO ORDER

560P	104	X9	320
Series	Capacitance code	Tolerance code	Voltage rating
560P	104 = 100nF	X9 = ± 10% X5 = ± 5%	320 = 320 V <sub>DC</sub>

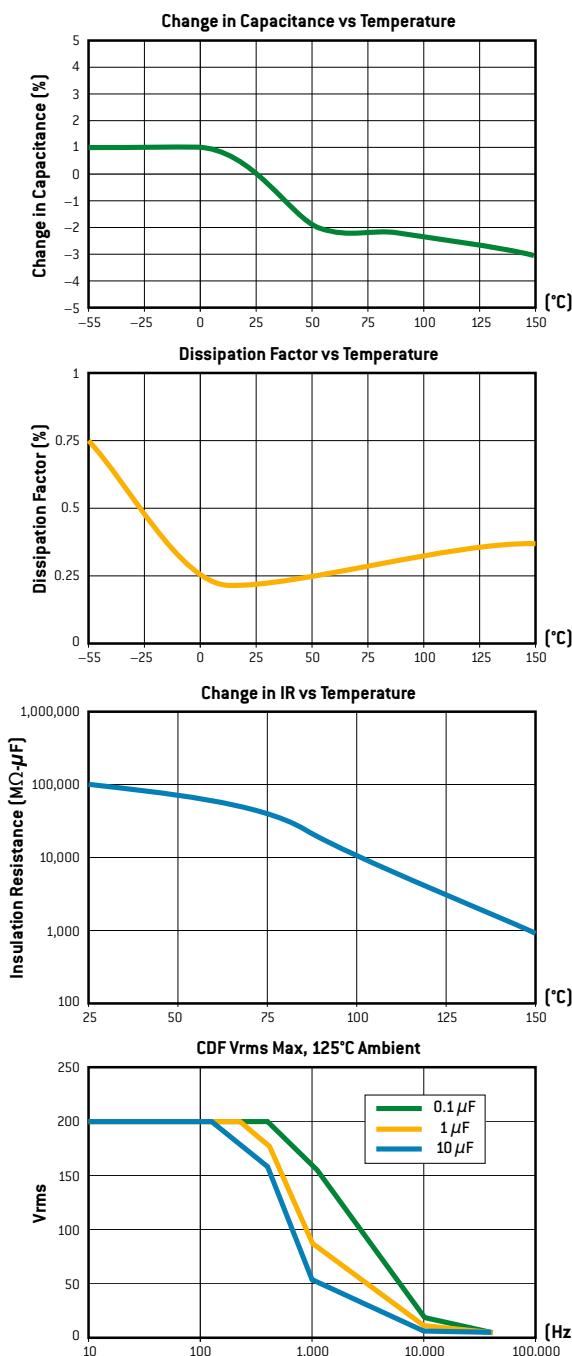
## OUTLINE DIMENSIONS in inches

Lead Wire Sizes	
Case Diameter	Lead AWG
< 0.200	No. 24
0.200 to 0.400	No. 22
0.401 to 0.500	No. 20
> 0.500	No. 18



\* Leads to be within  $\pm 0.062"$  at center line at egress, but not less than 0.031" from edge

## DIELECTRIC CHARACTERISTICS



## CONFIGURATION OUTLINE

Capacitance ( $\mu\text{F}$ )	Part Number	Dimensions in inches	
		+150°C	D max.
<b>320 V<sub>DC</sub></b>			
0.1	560P104X*320Y	0.16	0.75
0.22	560P224X*320Y	0.22	0.75
0.33	560P334X*320Y	0.27	0.75
0.47	560P474X*320Y	0.31	0.75
0.68	560P684X*320Y	0.37	0.75
0.82	560P824X*320Y	0.41	0.75
1	560P105X*320Y	0.29	1.25
2	560P205X*320Y	0.42	1.25
3	560P305X*320Y	0.52	1.25
5	560P505X*320Y	0.61	1.25
10	560P106X*320Y	0.78	1.5
<b>400 V<sub>DC</sub></b>			
0.1	560P104X*400Y	0.2	0.75
0.22	560P224X*400Y	0.28	0.75
0.33	560P334X*400Y	0.34	0.75
0.47	560P474X*400Y	0.4	0.75
0.68	560P684X*400Y	0.3	1.25
0.82	560P824X*400Y	0.33	1.25
1	560P105X*400Y	0.36	1.25
2	560P205X*400Y	0.54	1.25
3	560P305X*400Y	0.65	1.25
5	560P505X*400Y	0.68	1.5
10	560P106X*400Y	0.98	1.5
<b>560 V<sub>DC</sub></b>			
0.1	560P104X*560Y	0.28	0.75
0.22	560P224X*560Y	0.4	0.75
0.33	560P334X*560Y	0.48	0.75
0.47	560P474X*560Y	0.34	1.25
0.68	560P684X*560Y	0.41	1.25
0.82	560P824X*560Y	0.45	1.25
1	560P105X*560Y	0.49	1.25
2	560P205X*560Y	0.72	1.25
3	560P305X*560Y	0.7	1.75
5	560P505X*560Y	0.82	1.75
<b>800 V<sub>DC</sub></b>			
0.1	560P104X*800Y	0.44	0.75
0.22	560P224X*800Y	0.3	1.25
0.33	560P334X*800Y	0.36	1.25
0.47	560P474X*800Y	0.42	1.25
0.68	560P684X*800Y	0.5	1.25
0.82	560P824X*800Y	0.55	1.25
1	560P105X*800Y	0.61	1.25
2	560P205X*800Y	0.73	2
3	560P305X*800Y	0.89	2
5	560P505X*800Y	1.05	2

\* Input tolerance number to complete part number: 9 =  $\pm 10\%$ , 5 =  $\pm 5\%$

Custom configurations and extended/intermediary values available upon request.