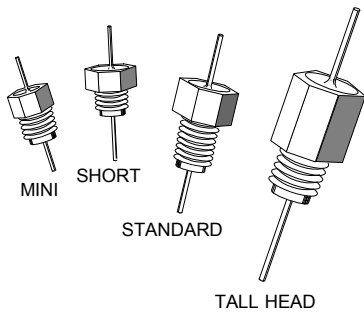


8-32 Low Pass Filters

8-32 style filters were once the most popular style of threaded devices in the world. They are still used where cost is the first issue and size is second. The 8-32 styles are the most cost effective of any bolt style. EMI offers a variety of convenient sizes and circuit configurations to fit almost any requirement. Below is a short discussion of the different types with links to specific products:



8-32 STYLE	“C”	“L”	“Pi”	“T”
Short (Hex Head)	B7C	B7L	N/A	N/A
Standard (Hex Head)	B8C	B8L	B8P	N/A
Tall Head (Hex Head)	T7C	T7L	T7P	T7T

“Short”; Short thread length to minimize protrusion past bulkheads. They may have the same or marginally smaller size heads than standard sizes but go up to .1uF. They are used where the high capacitance or voltage are required and smaller thread length is desired.

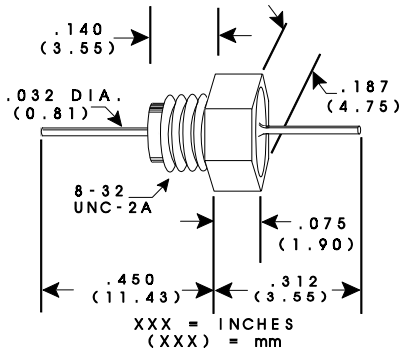
“Standard”; Full length threads and heads. They are popular where lowest cost is the priority and spacing and protrusion are not a concern. These styles originated decades ago when larger bodies were needed to house long tubular capacitors.

“Tall Head”; Broadband performance in a small body. Taller heads allow multiple capacitor/inductor elements to come together in a filter that offers tighter spacing over regular broadband filters. Ideal for low current, high performance, small size requirements.

B7 SERIES 8-32 "C" FILTER

SMALL(SHORT THREAD, SHALLOW HEX) 8-32

SMALL 8-32
"C" CIRCUIT



B7 STANDARD DIMENSIONS

Dimension Tolerances:

Case: +/- .015" (+/- .381mm) Lead Length: +/- .030" (+/- .762mm) Lead Dia.: +/- .002" (+/- .051mm)

Installation Temp:

N/A. Internal construction with high temp. Sn10 solder.

Material and Finish:

Steel case, copper leads, silver plating standard. Variations are available.

Marking:

Color dots standard. Custom marking available.

Cap /Tolerance:

0pF - .1µF +100/-0%
Other tolerances available.

Dissipation Factor:

3.5% Maximum

Insulation Resistance:

25°C = 1,000 Megohm-µF
125°C = 100 Megohm-µF

Dielectric Strength (DWV):

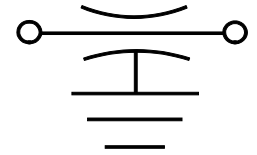
250% of Rated Voltage for 5 sec.

Max Mounting Torque:

6.0 in*lbs

Operating Temp:

-55°C to +125°C



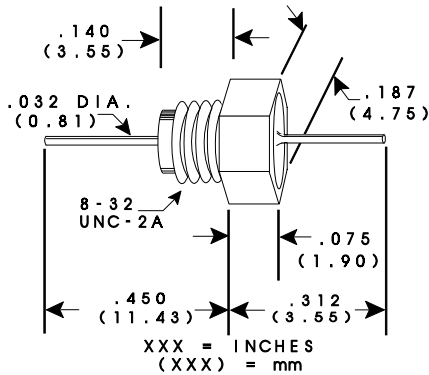
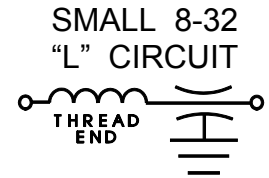
EMI PART NUMBER	CAP "C" CKT	COLOR DOT	MAX VDC	DC AMPS	MIN. NO LOAD INSERTION LOSS (dB) @ 25°C PER MIL-STD-220				
					1MHz	10MHz	100MHz	1GHz	10GHz
B7C000D	"0" pF	NONE	200*	10	-	-	-	-	-
B7C050D	5 pF	2 ORANGE	200*	10	-	-	-	-	-
B7C100D	10 pF	VIOLET	200*	10	-	-	-	5	20
B7C250D	25 pF	BLUE	200*	10	-	-	-	10	25
B7C101D	100 pF	GREEN	200*	10	-	-	3	20	28
B7C501D	500 pF	BROWN	200*	10	-	-	15	35	40
B7C102D	1,000 pF	WHITE	200*	10	-	5	20	35	45
B7C122D	1,200 pF	WHITE	200	10	-	5	20	35	45
B7C272D	2,700 pF	RED	200	10	5	10	25	40	50
B7C502D	5,000 pF	YELLOW	200	10	5	15	30	45	55
B7C103D	.01 µF	2 WHITE	200	10	6	21	35	50	60
B7C153B	.015 µF	2 WHITE	100	10	8	20	35	55	60
B7C273B	.027 µF	2 RED	100	10	10	28	42	65	65
B7C333B	.033 µF	2 RED	100	10	11	30	44	65	65
B7C503B	.05 µF	2 YELLOW	100	10	15	35	45	65	65
B7C104A	.1 µF	3 WHITE	50	10	22	40	47	65	65

*= HIGH VOLTAGE VARIANT AVAILABLE
MOUNTING HARDWARE ON REQUEST

	<p>EMI FILTER COMPANY 12750 59th Way North Clearwater, FL 33760 727-585-7990 Fax: 727-586-5138 Toll Free: 1-800-323-7990 email: sales@emifiltercompany.com</p>
--	---

B7 SERIES 8-32 "L" FILTER

SMALL(SHORT THREAD, SHALLOW HEX) 8-32



Cap /Tolerance:
0pF - .1 μ F +100/-0%
Other tolerances available.

Dissipation Factor:
3.5% Maximum

Insulation Resistance:
25°C = 1,000 Megohm- μ F
125°C = 100 Megohm- μ F

Dielectric Strength (DWV):
250% of Rated Voltage for 5 sec.

Max Mounting Torque:
6.0 in*lbs

Operating Temp:
-55°C to +125°C

B7L STANDARD DIMENSIONS

Dimension Tolerances:

Case: +/- .015" (+/- .381mm) Lead Length: +/- .030" (+/- .762mm) Lead Dia.: +/- .002" (+/- .051mm)

Installation Temp: N/A. Internal construction with high temp. Sn10 solder.

Material and Finish: Steel case, copper leads, silver plating standard. Variations are available.

Marking: Color dots standard. Custom marking available.

EMI PART NUMBER	CAP "L" CKT	COLOR DOT	MAX WVDC	DC AMPS	TYP. NO LOAD INSERTION LOSS (dB) @ 25°C PER MIL-STD-220				
					1MHz	10MHz	100MHz	1GHz	10GHz
B7L000D	"0" pF	NONE	200*	10	-	-	-	-	-
B7L050D	5 pF	2 ORANGE	200*	10	-	-	-	-	-
B7L100D	10 pF	VIOLET	200*	10	-	-	-	7	20
B7L250D	25 pF	BLUE	200*	10	-	-	-	13	25
B7L101D	100 pF	GREEN	200*	10	-	-	5	22	35
B7L501D	500 pF	BROWN	200*	10	-	-	18	37	45
B7L102D	1,000 pF	WHITE	200*	10	-	8	25	40	40
B7L122D	1,200 pF	WHITE	200*	10	-	8	28	42	50
B7L272D	2,700 pF	RED	200*	10	8	13	32	45	55
B7L502D	5,000 pF	YELLOW	200	10	7	17	35	47	55
B7L103D	.01 μ F	2 WHITE	200	10	8	27	48	65	65
B7L153B	.015 μ F	2 WHITE	100	10	10	28	50	65	65
B7L273B	.027 μ F	2 RED	100	10	13	35	53	75	75
B7L333B	.033 μ F	2 RED	100	10	13	33	55	75	75
B7L503B	.05 μ F	2 YELLOW	100	10	18	37	49	80	80
B7L104A	.1 μ F	3 WHITE	50	10	28	48	60	90	90

*= HIGH VOLTAGE VARIANT AVAILABLE

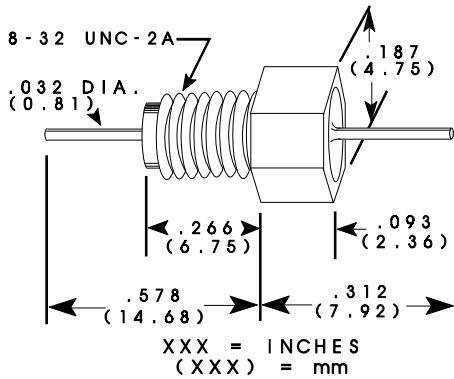
MOUNTING HARDWARE BY REQUEST



EMI FILTER COMPANY
12750 59th Way North
Clearwater, FL 33760
727-585-7990 Fax: 727-586-5138
Toll Free: 1-800-323-7990
email: sales@emifiltercompany.com

B8 SERIES 8-32 "C" FILTER

STD. 8-32
"C" CIRCUIT



STANDARD B8 DIMENSIONS

INDUSTRY STANDARD 8-32

Cap /Tolerance:

0pF - .1 μ F +100/-0%
Other tolerances available.

Dissipation Factor:

3.5% Maximum

Insulation Resistance:

25°C = 1,000 Megohm- μ F
125°C = 100 Megohm- μ F

Dielectric Strength (DWV):

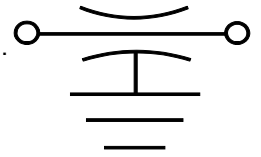
250% of Rated Voltage for 5 sec.

Max Mounting Torque:

6.0 in*lbs

Operating Temp:

-55°C to +125°C



Dimension Tolerances:

Case: +/- .015" (+/- .381mm) Lead Length: +/- .030" (+/- .762mm) Lead Dia.: +/- .002" (+/- .051mm)

Installation Temp:

N/A. Internal construction with high temp. Sn10 solder.

Material and Finish:

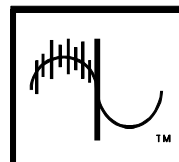
Steel case, copper leads, silver plating standard. Variations are available.

Marking:

Color dots standard. Custom marking available.

EMI PART NUMBER	CAP "C" CKT	COLOR DOT	MAX VDC	DC AMPS	MIN. NO LOAD INSERTION LOSS (dB) @ 25°C PER MIL-STD-220				
					1MHz	10MHz	100MHz	1GHz	10GHz
B8C000D	"0"pF	NONE	200*	10	-	-	-	-	-
B8C050D	5 pF	2 ORANGE	200*	10	-	-	-	-	-
B8C100D	10 pF	VIOLET	200*	10	-	-	-	5	20
B8C250D	25 pF	BLUE	200*	10	-	-	-	10	25
B8C101D	100 pF	GREEN	200*	10	-	-	3	20	28
B8C501D	500 pF	BROWN	200*	10	-	-	15	35	40
B8C102D	1,000 pF	WHITE	200*	10	-	5	20	35	45
B8C122D	1,200 pF	WHITE	200*	10	-	5	20	35	45
B8C272D	2,700 pF	RED	200*	10	5	10	25	40	50
B8C502D	5,000 pF	YELLOW	200	10	5	15	30	45	55
B8C103D	.01 μ F	2 WHITE	200	10	6	21	35	50	60
B8C153B	.015 μ F	2 WHITE	100	10	8	20	35	55	60
B8C273B	.027 μ F	2 RED	100	10	10	28	42	65	65
B8C333B	.033 μ F	2 RED	100	10	11	30	44	65	65
B8C503B	.05 μ F	2 YELLOW	100	10	15	35	45	65	65
B8C104A	.1 μ F	3 WHITE	50	10	22	40	47	65	65

* = HIGH VOLTAGE VARIANT AVAILABLE
MOUNTING HARDWARE ON REQUEST

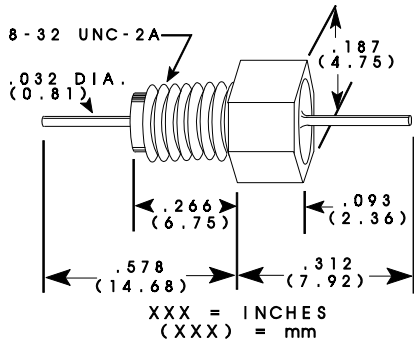


EMI FILTER COMPANY
12750 59th Way North
Clearwater, FL 33760
727-585-7990 Fax: 727-586-5138
Toll Free: 1-800-323-7990
email: sales@emifiltercompany.com

B8 SERIES 8-32 "L" FILTER

INDUSTRY STANDARD 8-32

STD. 8-32
"L" CIRCUIT



STANDARD B8L DIMENSIONS

Cap /Tolerance:
 0pF - .1 μ F +100/-0%
 Other tolerances available.

Dissipation Factor:
 3.5% Maximum

Insulation Resistance:
 25°C = 1,000 Megohm- μ F
 125°C = 100 Megohm- μ F

Dielectric Strength (DWV):
 250% of Rated Voltage for 5 sec.

Max Mounting Torque:
 6.0 in*lbs

Operating Temp:
 -55°C to +125°C



Dimension Tolerances:

Case: +/-0.015" (+/-0.381mm) Lead Length: +/-0.030" (+/-0.762mm) Lead Dia.: +/-0.002" (+/-0.051mm)

Installation Temp: N/A. Internal construction with high temp. Sn10 solder.

Material and Finish: Steel case, copper leads, silver plating standard. Variations are available.

Marking: Color dots standard. Custom marking available.

EMI PART NUMBER	CAP "L" CKT	COLOR DOT	MAX WVDC	DC AMPS	TYP. NO LOAD INSERTION LOSS (dB) @ 25°C PER MIL-STD-220				
					1MHz	10MHz	100MHz	1GHz	10GHz
B8L000D	"0"pF	NONE	200*	10	-	-	-	-	-
B8L050D	5 pF	2 ORANGE	200*	10	-	-	-	-	-
B8L100D	10 pF	VIOLET	200*	10	-	-	-	7	20
B8L250D	25 pF	BLUE	200*	10	-	-	-	13	25
B8L101D	100 pF	GREEN	200*	10	-	-	5	22	35
B8L501D	500 pF	BROWN	200*	10	-	-	18	37	45
B8L102D	1,000 pF	WHITE	200*	10	-	8	25	40	40
B8L122D	1,200 pF	WHITE	200*	10	-	8	28	42	50
B8L272D	2,700 pF	RED	200*	10	8	13	32	45	55
B8L502D	5,000 pF	YELLOW	200	10	7	17	35	47	55
B8L103D	.01 μ F	2 WHITE	200	10	8	27	48	65	65
B8L153B	.015 μ F	2 WHITE	100	10	10	28	50	65	65
B8L273B	.027 μ F	2 RED	100	10	13	35	53	75	75
B8L333B	.033 μ F	2 RED	100	10	13	33	55	75	75
B8L503B	.05 μ F	2 YELLOW	100	10	18	37	49	80	80
B8L104A	.1 μ F	3 WHITE	50	10	28	48	60	90	90

* = HIGH VOLTAGE VARIANT AVAILABLE
 MOUNTING HARDWARE ON REQUEST

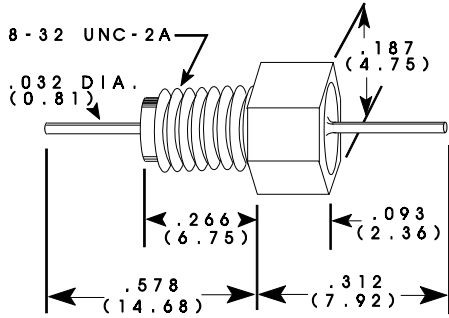


EMI FILTER COMPANY
 12750 59th Way North
 Clearwater, FL 33760
 727-585-7990 Fax: 727-586-5138
 Toll Free: 1-800-323-7990
 email: sales@emifiltercompany.com

B8 SERIES 8-32 "Pi" FILTER

INDUSTRY STANDARD 8-32

STD. 8-32
"PI" CIRCUIT



XXX = INCHES
(XXX) = mm

STANDARD B8 DIMENSIONS

Cap /Tolerance:
65pF - .075µF +100/-0%
Other tolerances available.

Dissipation Factor:
3.5% Maximum

Insulation Resistance:
25°C = 1,000 Megohm-µF
125°C = 100 Megohm-µF

Dielectric Strength (DWV):
250% of Rated Voltage for 5 sec.

Max Mounting Torque:
6.0 in*lbs

Operating Temp:
-55°C to +125°C

Dimension Tolerances:

Case: +/-0.015" (+/-0.381mm) Lead Length: +/-0.030" (+/-0.762mm) Lead Dia.: +/-0.002" (+/-0.051mm)

Installation Temp:

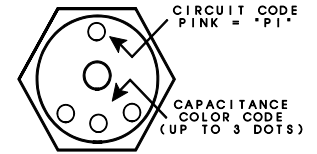
N/A. Internal construction with high temp. Sn10 solder.

Material and Finish:

Steel case, copper leads, silver plating standard. Variations are available.

Marking:

Color dots standard. Custom marking available.



EMI PART NUMBER	CAP. "Pi" CKT	COLOR DOT	MAX. VDC	MAX. DC AMPS	MIN. NO LOAD INSERTION LOSS (db) @ 25° C PER MIL-STD-220				
					1 MHz	10 MHz	100 MHz	1 GHz	10 GHz
B8P470D	47 pF	BLUE	200	10	-	-	-	10	15
B8P650D	65 pF	BLUE	200	10	-	-	-	15	30
B8P101D	100 pF	GREEN	200	10	-	-	-	27	35
B8P471D	470 pF	BROWN	200	10	-	-	-	35	45
B8P152D	1500 pF	WHITE	200	10	-	10	40	60	60
B8P302D	3000 pF	RED	200	10	-	15	45	60	70
B8P552B	5500 pF	YELLOW	100	10	-	15	65	70	70
B8P103B	.01µF	2 WHITE	100	10	10	32	78	80	80
B8P123B	.012 µF	2 WHITE	100	10	11	35	78	80	80
B8P153B	.015 µF	2 WHITE	100	10	13	40	80	85	85
B8P303A	.03 µF	2 RED	50	10	16	50	85	85	85
B8P473A	.047 µF	2 YELLOW	50	10	20	60	85	90	90
B8P653A	.065 µF	2 BROWN	50	10	23	65	85	90	90
B8P753A	.075 µF	2 BROWN	50	10	27	70	90	90	90

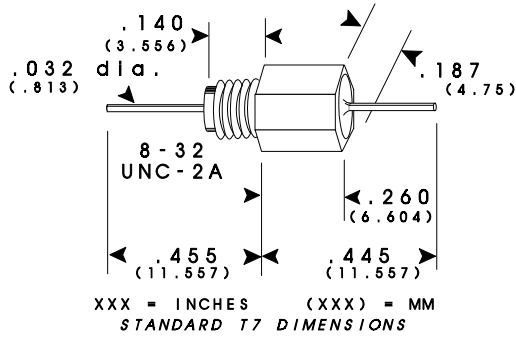
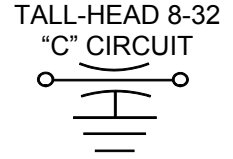


EMI FILTER COMPANY
12750 59th Way North
Clearwater, FL 33760
727-585-7990 Fax: 727-586-5138
Toll Free: 1-800-323-7990
email: sales@emifiltercompany.com

T7 SERIES "C" FILTERS

HIGH CAPACITANCE IN SMALL PACKAGES

TALL-HEAD 8-32



Cap /Tolerance:

.10 - .50 μ F +100/-0%
Other tolerances available.

Dissipation Factor:

3.5% Maximum

Insulation Resistance:

25°C = 1,000 Megohm- μ F
125°C = 100 Megohm- μ F

Dielectric Strength (DWV):

250% of Rated Voltage for 5 sec.

Max Mounting Torque:

6.0 in*lbs

Operating Temp:

-55°C to +125°C

Dimension Tolerances:

Case: +/- .015" (+/- .381mm) Lead Length: +/- .030" (+/- .762mm) Lead Dia.: +/- .002" (+/- .051mm)

Installation Temp:

N/A. Internal construction with high temp. Sn10 solder.

Material and Finish:

Steel case, copper leads, silver plating standard. Variations are available.

Marking:

Color dots standard. Custom marking available.

EMI PART NUMBER	CAP (μ F)	COLOR DOT	MAX WVDC	DC AMPS	TYP. NO LOAD INSERTION LOSS (dB) @ 25°C PER MIL-STD-220				
					1MHz	10MHz	100MHz	1GHz	10GHz
T7C104B	.10	3 WHITE	100	10	22	40	47	65	75
T7C204A	.20	2 GREEN	50	10	27	38	53	70	75
T7C254A	.25	2 BLUE	50	10	30	40	55	70	75
T7C304A	.30	2 VIOLET	50	10	28	41	56	70	75
T7C334A	.33	3 RED	50	10	31	43	56	72	75
T7C404A	.40	3 GREEN	50	10	33	45	58	72	75
T7C504A	.50	3 YELLOW	50	10	34	43	60	75	75

MOUNTING HARDWARE ON REQUEST



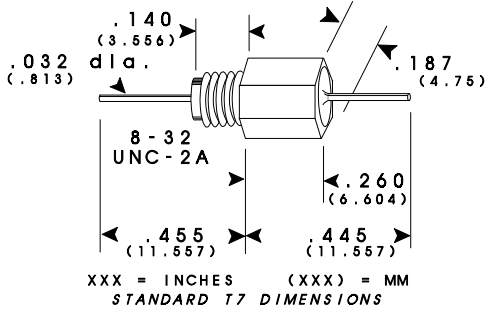
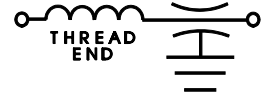
EMI FILTER COMPANY
12750 59th Way North
Clearwater, FL 33760
727-585-7990 Fax: 727-586-5138
Toll Free: 1-800-323-7990
email: sales@emifiltercompany.com

T7 SERIES "L" FILTERS

HIGH CAPACITANCE IN SMALL PACKAGES

TALL-HEAD 8-32

TALL-HEAD 8-32
"L" CIRCUIT



Cap /Tolerance:

.10 - .50 μ F +100/-0%
Other tolerances available.

Dissipation Factor:

3.5% Maximum

Insulation Resistance:

25°C = 1,000 Megohm- μ F
125°C = 100 Megohm- μ F

Dielectric Strength (DWV):

250% of Rated Voltage for 5 sec.

Max Mounting Torque:

6.0 in*lbs

Operating Temp:

-55°C to +125°C

Dimension Tolerances:

Case: +/-0.015" (+/-0.381mm) Lead Length: +/-0.030" (+/-0.762mm) Lead Dia.: +/-0.002" (+/-0.051mm)

Installation Temp:

N/A. Internal construction with high temp. Sn10 solder.

Material and Finish:

Steel case, copper leads, silver plating standard. Variations are available.

Marking:

Color dots standard. Custom marking available.

EMI PART NUMBER	CAP (μ F)	COLOR DOT	MAX WVDC	DC AMPS	TYP. NO LOAD INSERTION LOSS (dB) @ 25°C PER MIL-STD-220				
					1MHz	10MHz	100MHz	1GHz	10GHz
* T7L104B	.10	3 WHITE	100	10	25	40	50	70	75
* T7L204A	.20	2 GREEN	50	10	28	40	55	70	75
* T7L254A	.25	2 BLUE	50	10	31	41	56	70	75
*T7L304A	.30	2 VIOLET	50	10	30	42	56	70	75
*T7L334A	.33	3 RED	50	10	33	45	58	72	75
*T7L404A	.40	3 GREEN	50	10	36	40	60	75	75
*T7L504A	.50	3 YELLOW	50	10	36	43	60	75	75

* = REVERSE "L" (INDUCTOR OPPOSITE THREAD) ALSO AVAILABLE

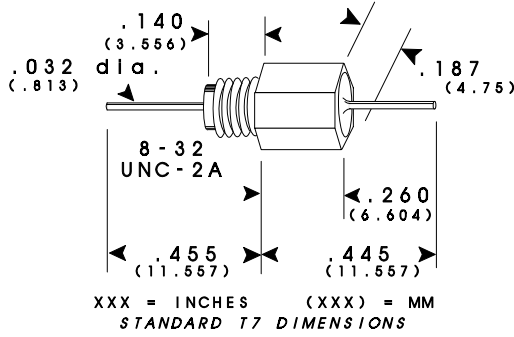
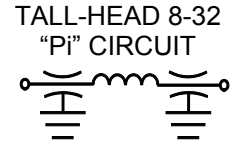
MOUNTING HARDWARE ON REQUEST

	<p>EMI FILTER COMPANY 12750 59th Way North Clearwater, FL 33760 727-585-7990 Fax: 727-586-5138 Toll Free: 1-800-323-7990 email: sales@emifiltercompany.com</p>
--	---

T7 SERIES "PI" FILTERS

HIGH CAPACITANCE IN SMALL PACKAGES

TALL-HEAD 8-32



- Cap /Tolerance:**
1500 Pf - .20 μ F +100/-0%
Other tolerances available.
- Dissipation Factor:**
3.5% Maximum
- Insulation Resistance:**
25°C = 1,000 Megohm- μ F
125°C = 100 Megohm- μ F
- Dielectric Strength (DWV):**
250% of Rated Voltage for 5 sec.
- Max Mounting Torque:**
6.0 in*lbs
- Operating Temp:**
-55°C to +125°C

Dimension Tolerances:

Case: +/- .015" (+/- .381mm) Lead Length: +/- .030" (+/- .762mm) Lead Dia.: +/- .002" (+/- .051mm)

Installation Temp:

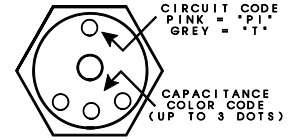
N/A. Internal construction with high temp. Sn10 solder.

Material and Finish:

Steel case, copper leads, silver plating standard. Variations are available.

Marking:

Color dots standard. Custom marking available.



EMI PART NUMBER	CAP.	COLOR CODE (DOTS)	MAX. WVDC	DC AMPS	MIN. NO LOAD INSERTION LOSS (db) @ 25° C per MIL-STD-220					
					KHz		MHz			
					100	300	1	10	100	1000
T7P152D	1500 pF	WHITE	200	10			4	13	56	83
T7P502D	5000 pF	YELLOW	200	10	4	6	7	22	66	85
T7P103D	.01 μ F	2 WHITE	200	10	4	6	10	32	78	81
T7P303B	.03 μ F	2 RED	100	10	6	12	16	50	85	85
T7P503B	.05 μ F	2 YELLOW	100	10	10	17	20	64	88	88
T7P104A	.10 μ F	3 WHITE	50	10	14	21	27	73	85	85
T7P204A	.20 μ F	2 GREEN	50	10	18	27	32	80	85	90

MOUNTING HARDWARE ON REQUEST

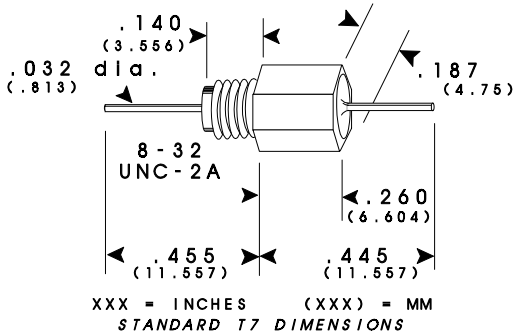
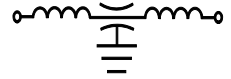


EMI FILTER COMPANY
 12750 59th Way North
 Clearwater, FL 33760
 727-585-7990 Fax: 727-586-5138
 Toll Free: 1-800-323-7990
 email: sales@emifiltercompany.com

T7 SERIES "T" FILTERS

TALL-HEAD 8-32 BODY

TALL-HEAD 8-32
"T" CIRCUIT



Cap /Tolerance:
1500 Pf - .20 μ F +100/-0%
Other tolerances available.

Dissipation Factor:
3.5% Maximum

Insulation Resistance:
25°C = 1,000 Megohm- μ F
125°C = 100 Megohm- μ F

Dielectric Strength (DWV):
250% of Rated Voltage for 5 sec.

Max Mounting Torque:
6.0 in*lbs

Operating Temp:
-55°C to +125°C

Dimension Tolerances:

Case: +/- .015" (+/- .381mm) Lead Length: +/- .030" (+/- .762mm) Lead Dia.: +/- .002" (+/- .051mm)

Installation Temp:

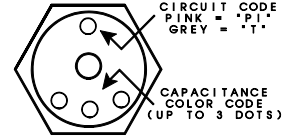
N/A. Internal construction with high temp. Sn10 solder.

Material and Finish:

Steel case, copper leads, silver plating standard. Variations are available.

Marking:

Color dots standard. Custom marking available.



EMI PART NUMBER	CAP.	COLOR CODE (DOTS)	MAX. WVDC	DC AMPS	MIN. NO LOAD INSERTION LOSS (db) @ 25° C per MIL-STD-220					
					KHz		MHz			
					100	300	1	10	100	1000
T7T152D	1500 pF	WHITE	200	10				13	37	51
T7T502D	5000 pF	YELLOW	200	10	3	4	6	24	48	62
T7T103D	.01 μ F	2 WHITE	200	10	4	7	13	32	55	65
T7T303B	.03 μ F	2 RED	100	10	7	10	20	40	60	85
T7T503B	.05 μ F	2 YELLOW	100	10	9	17	24	44	62	85
T7T104A	.10 μ F	3 WHITE	50	10	14	22	30	48	61	88

MOUNTING HARDWARE ON REQUEST

	<p>EMI FILTER COMPANY 12750 59th Way North Clearwater, FL 33760 727-585-7990 Fax: 727-586-5138 Toll Free: 1-800-323-7990 email: sales@emifiltercompany.com</p>
--	---