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Radial Leaded Polypropylene Film Capacitors with Double Sided Metallized Electrodes



APPLICATIONS

- *Motor Speed Control*
- *Switching Power Supplies*
- *Induction Heaters*
- *Resonant Circuits*

FEATURES

- *High Current*
- *High Voltage*
- *Multiple Lead Styles (2,4, lugs)*
- *Small Size*

SPECIFICATIONS

Operating Temperature Range		**-40°C to +85°C (+100°C observing voltage and current de-rating)**					
Capacitance Tolerance		**±10% at 1kHz, 25°C ±5% optional**					
Surge/AC Voltage	**WVDC**	**370**	**500**	**600**	**700**	**800**	
	SVDC	470	625	750	875	1200	
	VAC	160	250	330	380	380	
		For T>+85°C the rated voltage must be de-rated by 1.25%/°C					
Dissipation Factor (max) at 1kHz,25°C		**Freq (kHz)**	**C≤5µF**	**5µF<C≤30µF**	**C>30µF**		
		1	.05%	.08%	.1%		
Insulation Resistance @20°C(<70% RH) for 1 minute at 100VDC applied		>30,000MΩ x µF not to exceed 30,000MΩ					
Self inductance		<1nH/mm of body length and lead wire length.					
Dielectric Strength		**Terminal to Terminal**			**Terminal to Case**		
		160% of VDC applied for 10 seconds and 25°C			3 KVAC applied for 60 seconds at 25°C		
Life Expectancy		>100,000 hours for WVDC,30000 hours for VAC at 70°C					
Failure quota		$300/1x10^{9}$ component hours					
Long term Stability		<1% after 2 years at standard enviromental conditions					
Construction		Double metallized film with polypropylene film and internal series connections					
Coating		Flame retardant plastic box with epoxy end fill (UL94V-0)					
Lead terminations		Lead free tinned copper leads (RoHS compliant)					

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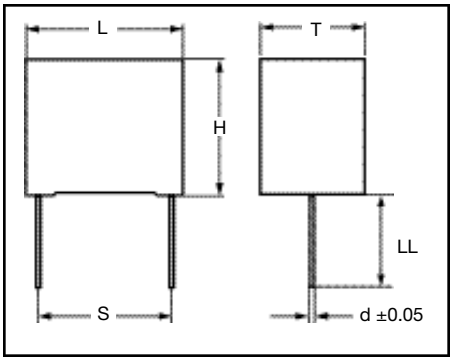
PHYSICAL DIMENSIONS

2 Lead Construction

WVDC (VAC) / µF	370 (200)	500 (250)	600 (330)	700 (380)	800 (400)
1	→	→	→	32x22x13	32x24.5x15
1.5	→	→	32x22x13	32x24.5x15	32x33x18
2	→	32x22x13	32x24.5x15	32x33x18	
2.2	→	32x22x13	32x24.5x15	→	32x33x18
2.5	→	→	32x28x14	→	42.5x28x17
3	→	→	→	32x33x18 42.5x28x17	32x37x22
3.3	→	32x24.5x15	32x33x18	→	42.5x30x22
4	32x22x13	32x33x18	32x33x18 42.5x28x17	32x37x22 42.5x30x22	42.5x33.5x22
5	32x28x14	32x33x18	32x37x22 42.5x30x22	42.5x33.5x22	42.5x37x28
6.8	32x33x18	32x37x22	42.5x33.5x22		
7.5	→	42.5x30x22			
8	→	→	→	42.5x37x28	42.5x45x30
10	32x37x22 42.5x28x17	42.5x33.5x22	42.5x37x28	42.5x45x30	57.5x45x30
12.5	→	→	→	→	57.5x45x30
15	42.5x30x22	42.5x37x28	42.5x45x30	57.5x45x30	57.5x50x35
20	→	→	57.5x45x30	57.5x50x35	
22	42.5x37x28	42.5x45x30			
25	→	57.5x45x30	57.5x50x35		
30	→	457.5x45x30			
33	42.5x45x30				
40	57.5x45x30	57.5x50x35			
50	57.5x50x30				
60	57.5x50x35				

Convert to inches, divide by 25.4 **LxHxT mm**

L	32	42.5	57.5
S	27.5	37.5	52.5
d	1.0,1.2	1.2	1.2



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Radial Leaded Polypropylene Film Capacitors with Double Sided Metallized Electrodes

STANDARD PARTS LISTING

2 Lead Construction

Capacitance (µF)	WVDC	IC PART NUMBER	dv/dt (V/µs)	Maximum RMS Ripple Current (A) 100kHz,+70°C	Typical ESR mΩ 100kHz, +25°C	L x H x T (mm)
1	700	**105MHBA06K2H**	110	15.5	5.5	32x22x13
1	800	**105MHBA01K2H**	120	13.8	6.5	32x24.5x15
1.5	600	**155MHBA02K2H**	90	13	6	32x22x13
1.5	700	**155MHBA06K2H**	110	12.5	6.5	32x24.5x15
1.5	800	**155MHBA01K2H**	120	11.1	8.5	32x33x18
2	500	**205MHBA03K2H**	70	14.4	6	32x22x13
2	600	**205MHBA02K2H**	90	13	7	32x24.5x15
2	700	**205MHBA06K2H**	110	10.6	7.5	32x28x14
2.2	500	**225MHBA03K2H**	70	13.6	6	32x22x13
2.2	600	**225MHBA02K2H**	90	10.6	7	32x24.5x15
2.2	800	**225MHBA01K2H**	120	9.1	9.5	32x33x18
2.5	600	**255MHBA02K2H**	90	10.1	8	32x28x14
2.5	800	**255MHBA01K2J**	82.5	9.8	9	42.5x28x17
3	700	**305MHBA06K2H**	110	8.6	10	32x33x18
3	700	**305MHBA06K2J**	75	9.9	9	42.5x28x17
3	800	**305MHBA01K2H**	120	7.8	12	32x37x22
3.3	500	**335MHBA03K2H**	70	11	7	32x24.5x15
3.3	600	**335MHBA02K2H**	90	8.7	10	32x33x18
3.3	800	**335MHBA01K2J**	82.5	8.3	11	42.5x30x22
4	370	**405MHBA04K2H**	55	11.2	6.5	32x22x13
4	500	**405MHBA03K2H**	70	9.9	8.5	32x33x18
4	600	**405MHBA02K2H**	90	7	11	32x33x18
4	600	**405MHBA02K2J**	60	8.9	9.5	42.5x28x17
4	700	**405MHBA06K2H**	110	7.4	12	32x37x22
4	700	**405MHBA06K2J**	75	8.5	10.5	42.5x30x22
4	800	**405MHBA01K2J**	82.5	7.3	12	42.5x33.5x22
5	370	**505MHBA04K2H**	55	9.9	7.5	32x28x14
5	500	**505MHBA03K2H**	70	8.7	9.5	32x33x18
5	600	**505MHBA02K2H**	90	7	12	32x37x22
5	600	**505MHBA02K2J**	60	7.3	11.5	42.5x30x22
5	700	**505MHBA06K2J**	75	7.3	12	42.5x33.5x22

Capacitance (µF)	WVDC	IC PART NUMBER	dv/dt (V/µs)	Maximum RMS Ripple Current (A) 100kHz,+70°C	Typical ESR mΩ 100kHz, +25°C	L x H x T (mm)
5	800	**505MHBA01K2J**	82.5	6.5	14	42.5x37x28
6.8	370	**685MHBA04K2H**	55	8.3	10.5	32x33x18
6.8	500	**685MHBA03K2H**	70	7.7	12	32x37x22
6.8	600	**685MHBA02K2J**	60	6.4	12.5	42.5x33.5x22
7.5	500	**755MHBA03K2J**	47.5	8.3	10	42.5x30x22
8	700	**805MHBA06K2J**	75	5.8	14	42.5x37x28
8	800	**805MHBA01K2J**	82.5	4.7	14	42.5x45x30
10	370	**106MHBA04K2H**	55	6	13	32x37x22
10	370	**106MHBA04K2J**	37.5	6.9	10.5	42.5x28x17
10	500	**106MHBA03K2J**	47.5	6.7	12	42.5x33.5x22
10	600	**106MHBA02K2J**	60	5.4	14	42.5x37x28
10	700	**106MHBA06K2J**	75	5.3	14	42.5x45x30
10	800	**106MHBA01K2R**	55	5.9	14	57.5x45x30
12.5	800	**126MHBA01K2R**	55	5.4	14	57.5x45x30
15	370	**156MHBA04K2J**	37.5	5.7	12.5	42.5x30x22
15	500	**156MHBA03K2J**	47.5	5.4	14	42.5x37x28
15	600	**156MHBA02K2J**	60	4.4	14	42.5x45x30
15	700	**156MHBA06K2R**	50	5.4	14	57.5x45x30
15	800	**156MHBA01K2R**	55	5	14	57.5x50x35
20	600	**206MHBA02K2R**	40	4.7	14	57.5x45x30
20	700	**206MHBA06K2R**	50	4.7	14	57.5x50x35
22	370	**226MHBA04K2J**	37.5	4.7	14	42.5x37x28
22	500	**226MHBA03K2J**	47.5	4.5	14	42.5x45x30
25	500	**256MHBA03K2R**	32.5	5	14	57.5x45x30
25	600	**256MHBA02K2R**	40	4.2	14	57.5x50x35
30	500	**306MHBA03K2R**	32.5	4.5	14	57.5x45x30
33	370	**336MHBA04K2J**	37.5	4	14	42.5x45x30
40	370	**406MHBA04K2R**	25	4.5	14	57.5x45x30
40	500	**406MHBA03K2R**	32.5	3.9	14	57.5x50x35
50	370	**506MHBA04K2R**	25	3.9	14	57.5x50x30
60	370	**606MHBA04K2R**	25	3.6	14	57.5x50x35

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PHYSICAL DIMENSION

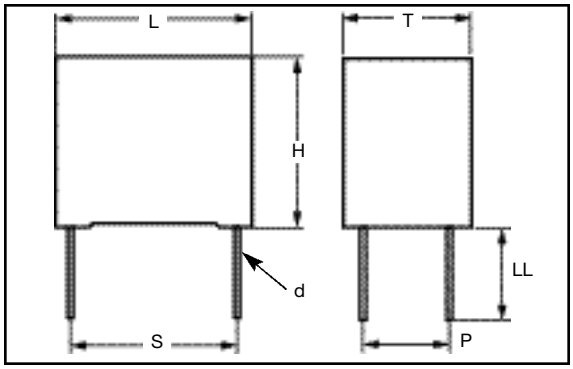
4 Lead Construction

WVDC (VAC) / µF	370 (160)	500 (250)	600 (330)	700 (380)	800 (400)
3	→	→	→	32x33x18	32x37x22
3.3	→	→	32x33x18		
4	→	→	32x33x18	32x37x22	
5	→	32x33x18	32x37x22	→	42.5x37x28
6.8	32x33x18	32x37x22			
8	→	→	→	42.5x37x28	42.5x45x30
10	32x37x22	42.5x33.5x22	42.5x37x28	42.5x45x30	57.5x45x30
12.5	→	→	→	→	57.5x45x30
15	42.5x30x22 42.5x45x30	42.5x37x28	→	57.5x45x30	57.5x50x35
20	→	→	57.5x45x30	57.5x50x35	
22	42.5x37x28	42.5x45x30			
25	→	57.5x45x30	57.5x50x35		
30	→	57.5x45x30			
33	42.5x45x30				
40	57.5x45x30	57.5x50x35			
50	57.5x50x35				
60	57.5x50x35				

Convert to inches, divide by 25.4

LxHxT mm

4 Lead Construction



L	32	32	32	42.5	42.5	57.5
S	27.5	27.5	27.5	37.5	37.5	52.5
H	<22	22<H<28	≥28	≤37	>37	ALL
P	10.2	52.5	10.2	10.2	20.3	20.3
d	0.8	1.2	1.2	1.2	1.2	1.2

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STANDARD PARTS LISTING

4 Lead Construction

Capacitance (µF)	WVDC	IC PART NUMBER	dv/dt (V/µs)	Maximum RMS Ripple Current (A) 100kHz,+70°C	Typical ESR mΩ 100kHz, +25°C	L x H x T (mm)
3	700	**305MHBA06K4H**	110	7.9	11.5	32x33x18
3	800	**305MHBA01K4H**	120	7.1	13.5	32x37x22
3.3	600	**335MHBA02K4H**	90	8	11.5	32x33x18
4	600	**405MHBA02K4H**	90	7	12.5	32x33x18
4	700	**405MHBA06K4H**	110	6.7	13.5	32x37x22
5	500	**505MHBA03K4H**	70	8	11	32x33x18
5	600	**505MHBA02K4H**	90	6.3	13.5	32x37x22
5	800	**505MHBA01K4J**	82.5	5.9	15.5	42.5x37x28
6.8	370	**685MHBA04K4H**	55	7.6	12	32x33x18
6.8	500	**685MHBA03K4H**	70	7	13.5	32x37x22
8	700	**805MHBA06K4J**	75	5.2	16	42.5x37x28
8	800	**805MHBA01K4J**	82.5	4.1	19.5	42.5x45x30
10	370	**106MHBA04K4H**	55	5.3	15	32x37x22
10	500	**106MHBA03K4J**	47.5	6.1	13.5	42.5x33.5x22
10	600	**106MHBA02K4J**	60	4.8	16.5	42.5x37x28
10	700	**106MHBA06K4J**	75	4.7	18.5	42.5x45x30
10	800	**106MHBA01K4R**	55	5.3	18.5	57.5x45x30
12.5	800	**126MHBA01K4R**	55	4.8	20	57.5x45x30

Capacitance (µF)	WVDC	IC PART NUMBER	dv/dt (V/µs)	Maximum RMS Ripple Current (A) 100kHz,+70°C	Typical ESR mΩ 100kHz, +25°C	L x H x T (mm)
15	370	**156MHBA02K4J**	60	3.8	20	42.5x45x30
15	370	**156MHBA04K4J**	37.5	5.1	14	42.5x30x22
15	500	**156MHBA03K4J**	47.5	4.8	16.5	42.5x37x28
15	700	**156MHBA06K4R**	50	4.8	19.5	57.5x45x30
15	800	**156MHBA01K4R**	55	4.4	22	57.5x50x35
20	600	**206MHBA02K4R**	40	4.1	21	57.5x45x30
20	700	**206MHBA06K4R**	50	4.1	22.5	57.5x50x35
22	370	**226MHBA04K4J**	37.5	4.1	17.5	42.5x37x28
22	500	**226MHBA03K4J**	47.5	3.9	19.5	42.5x45x30
25	500	**256MHBA03K4R**	32.5	4.4	20	57.5x45x30
25	600	**256MHBA02K4R**	40	3.6	24	57.5x50x35
30	500	**306MHBA03K4R**	32.5	3.9	22	57.5x45x30
33	370	**336MHBA04K4J**	37.5	3.4	21.5	42.5x45x30
40	370	**406MHBA04K4R**	25	3.9	22	57.5x45x30
40	500	**406MHBA03K4R**	32.5	3.3	25	57.5x50x35
50	370	**506MHBA04K4R**	25	3.3	25	57.5x50x35
60	370	**606MHBA04K4R**	20	3	26	57.5x50x35

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PHYSICAL DIMENSIONS

Lug Terminals

µF \ WVDC (VAC)	370 (160)	500 (250)	600 (330)	700 (380)	800 (400)
2.5					42.5x28x17
3				42.5x28x17	
3.3					42.5x30x22
4			42.5x28x17	42.5x30x22	42.5x33.5x22
5			42.5x30x22	42.5x33.5x22	
6.8			42.5x33.5x22		
7.5		42.5x30x22			
8				42.5x37x28	42.5x45x30
10	42.5x28x17	42.5x33.5x22	42.5x37x28	42.5x45x30	57.5x45x30
12.5					57.5x45x30
15	42.5x30x22	42.5x37x28	42.5x45x30	57.5x45x30	57.5x50x35
20			57.5x45x30	57.5x50x35	
22	42.5x37x28	42.5x45x30			
25		57.5x45x30	57.5x50x35		
30		57.5x45x30			
33	42.5x45x30				
40	57.5x45x30	57.5x50x35			
50	57.5x50x35				
60	57.5x50x35				

Convert to inches, divide by 25.4

LxHxT mm

Capacitance (µF)	WVDC	IC PART NUMBER	dv/dt (V/µs)	Maximum RMS Ripple Current (A) 100kHz,+70°C	Typical ESR mΩ 100kHz, +25°C	L x H x T (mm)
2.5	800	**255MHBA01K##**	82.5	9.1	10.5	42.5x28x17
3	700	**305MHBA06K##**	75	9.2	10.5	42.5x28x17
3.3	800	**335MHBA01K##**	82.5	7.6	12.5	42.5x30x22
4	600	**405MHBA02K##**	60	8.2	11	42.5x28x17
4	700	**405MHBA06K##**	75	7.8	12	42.5x30x22
4	800	**405MHBA01K##**	82.5	6.6	13.5	42.5x33.5x22
5	600	**505MHBA02K##**	60	6.6	13	42.5x30x22
5	700	**505MHBA06K##**	75	6.6	13.5	42.5x33.5x22
6.8	600	**685MHBA02K##**	60	5.7	15	42.5x33.5x22
7.5	500	**755MHBA03K##**	47.5	7.5	11.5	42.5x30x22
8	700	**805MHBA06K##**	75	5.1	17.5	42.5x37x28
8	800	**805MHBA01K##**	82.5	4	21.5	42.5x45x30
10	370	**106MHBA04K##**	37.5	6.1	12.5	42.5x28x17
10	500	**106MHBA03K##**	47.5	6	14.5	42.5x33.5x22
10	600	**106MHBA02K##**	60	4.7	18	42.5x37x28
10	700	**106MHBA06K##**	75	4.6	20	42.5x45x30
10	800	**106MHBA01K##**	55	5.2	20	57.5x45x30
12.5	800	**126MHBA01K##**	55	4.7	22	57.5x45x30

Capacitance (µF)	WVDC	IC PART NUMBER	dv/dt (V/µs)	Maximum RMS Ripple Current (A) 100kHz,+70°C	Typical ESR mΩ 100kHz, +25°C	L x H x T (mm)
15	370	**156MHBA04K##**	37.5	5	15	42.5x30x22
15	500	**156MHBA03K##**	47.5	4.7	17.5	42.5x37x28
15	600	**156MHBA02K##**	60	3.7	22	42.5x45x30
15	700	**156MHBA06K##**	50	4.7	22	57.5x45x30
15	800	**156MHBA01K##**	55	4.3	24	57.5x50x35
20	600	**206MHBA02K##**	40	4	23	57.5x45x30
20	700	**206MHBA06K##**	50	4	25	57.5x50x35
22	370	**226MHBA04K##**	37.5	4	19	42.5x37x28
22	500	**226MHBA03K##**	47.5	3.8	21.5	42.5x45x30
25	500	**256MHBA03K##**	32.5	4.3	22	57.5x45x30
25	600	**256MHBA02K##**	40	3.5	27	57.5x50x35
30	500	**306MHBA03K##**	32.5	3.8	24	57.5x45x30
33	370	**336MHBA04K##**	37.5	3.3	23	42.5x45x30
40	370	**406MHBA04K##**	25	3.8	24	57.5x45x30
40	500	**406MHBA03K##**	32.5	3.2	28	57.5x50x35
50	370	**506MHBA04K##**	25	3.2	28	57.5x50x35
60	370	**606MHBA04K##**	20	2.9	29	57.5x50x35

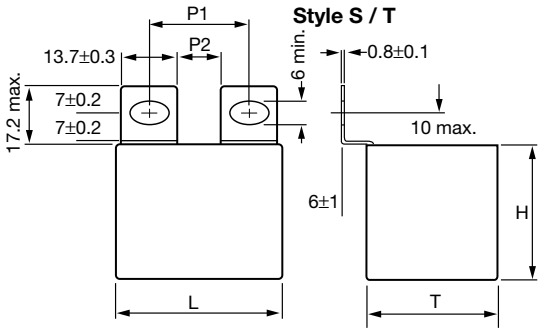
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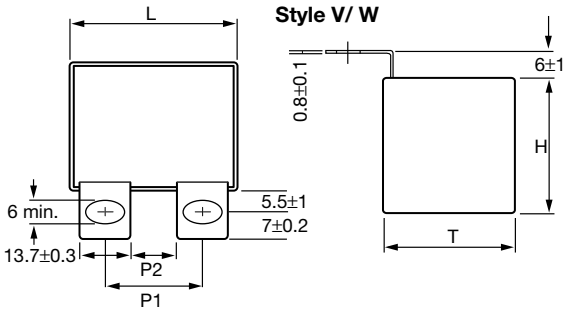
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STYLE DRAWINGS

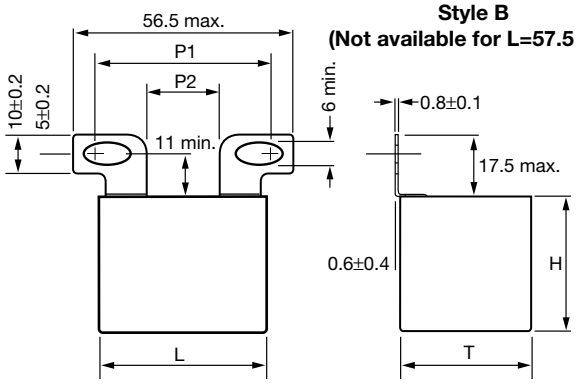
Style S / T



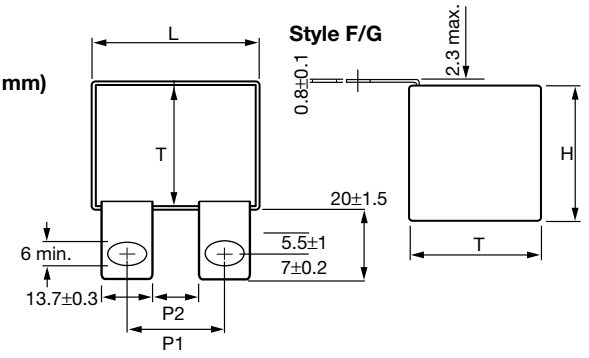
Style V/ W



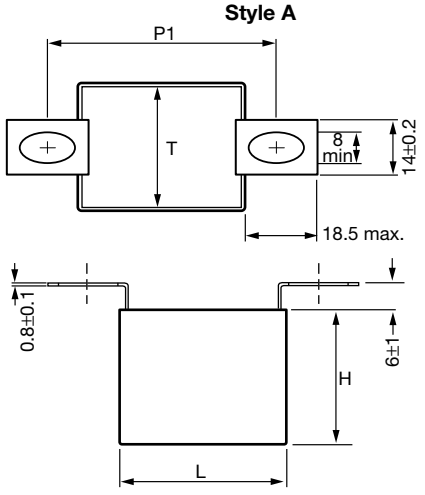
Style B
(Not available for L=57.5 mm)



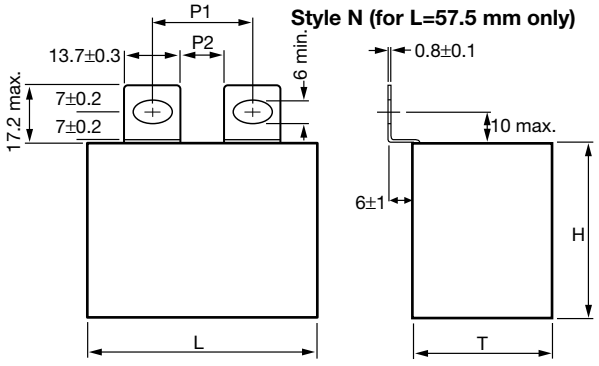
Style F/G



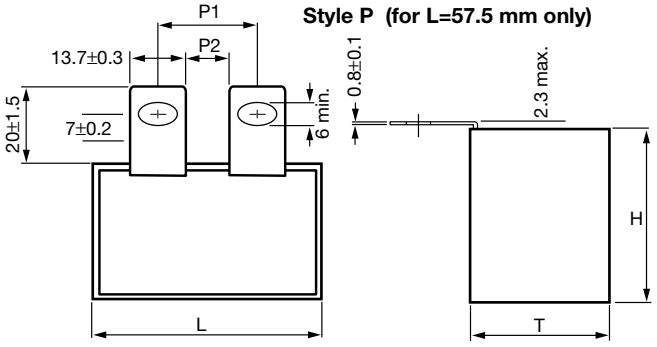
Style A



Style N (for L=57.5 mm only)



Style P (for L=57.5 mm only)



Dimensions in mm

Fixing pitch and distance between lugs (mm)			
Lugs	L	P1	P2
S, V, F	42.5	23√28 (M6)	11
	57.5	37√42 (M6)	24
T, W, G	42.5	20√25 (M6)	8
	57.5	34√39 (M6)	21
N, P	42.5	Not available	
	57.5	23√28 (M6)	11
A	42.5	51√64 (M8)	-
	57.5	65√78 (M8)	-
B	42.5	32√45 (M6)	17
	57.5	Not available	

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