

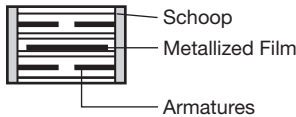
### APPLICATIONS

- Commodity Product:
  - Decoupling with AC or pulse components
  - High current uses (TV deflection coils)
  - Capacitive dividers
  - Energy saving lamps, etc.

### TECHNOLOGY

- Dielectric: Polypropylene film foil
- Wound capacitor
- Leads: Radial tinned wire
- Protection: Plastic case (UL94: V-O) / Polyurethane resin
- Marking: Logo
  - Type
  - Nominal Capacitance
  - Tolerance (EIA)
  - DC Nominal Voltage
  - Example: **T BA 4.7n J 630**
- Delivery Mode: Bulk
  - Taped (reel) for pitch = 15mm only

### Schematic Cross Section



### PERFORMANCE CHARACTERISTICS

Climatic Category:	55/100/56
Capacitance Range:	$C_R$ 1 nF to 390 nF (E24)
Tolerances on $C_R$ :	$\pm 5\%$ , $\pm 10\%$
Nominal Voltages:	$V_{r-}$ 630/1000/1600/2000 V $V_{r-}$ 350/450/550/650 V
Category Voltage:	$V_c = 0.7 V_R$ at 100°C
Test Voltage:	$V_o = 1.6 V_R / 2s$ at 25°C
Total Self Inductance (L):	For lead length = 2mm
Pitch (mm)	15      22.5      27.5
L (nH)	10      18      18
Tangent of Loss Angle:	D.F. $\leq 10 \cdot 10^{-4}$ at 1 kHz 25°C
Insulation Resistance:	IR > 100 G $\Omega$ for C $\leq 0.33\mu F$ IR > 30000s for C > 0.33 $\mu F$
Condition of Measurement:	100V ( $\pm 15$ ) at 25°C

dv/dt:

$V_{R-}$	630	1000	1600	2000
(dv/dt) <sub>R</sub> max pitch: 15mm	6900	7900	10800	14900
(dv/dt) <sub>R</sub> max pitch: 22.5mm	2900	2800	6900	7700
(dv/dt) <sub>R</sub> max pitch: 27.5mm	1800	1700	5100	5400

Thermal Resistance:  $R_{th}$  hot spot/ambient (°C/W)

Pitch (mm)	15mm				22.5mm				27.5mm			
Case	6	8	9	10	12	13	23	24	16	P0	18	19
Rth	126	92	78	64	53	45	37	29	40	36	27	22

### STANDARDIZATION

- CEI 384-13
  - Performance Class 2
- CEI 384-17
  - Performance Class 1-1

# BA 15/22/27

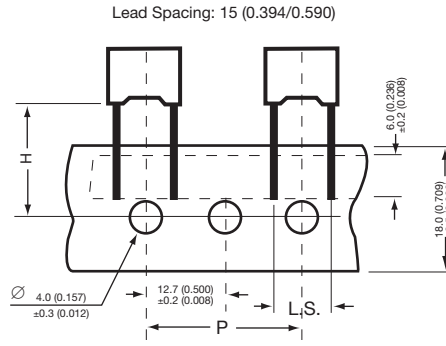


Pitch = 15mm / 22.5mm / 27.5mm

## PACKAGING

### • Reel

Taping Suffix EN	
	Lead Spacing Tol $\pm 0.4$ (0.016)
	Pitch: 15 (0.590)
P	25.4 $\pm 1$ (1.0 $\pm 0.039$ )
H	16 $+1.5/-0.5$ (0.600 $+0.059/-0.020$ )



Adhesive tape ▲  
(Other sizes according to standard CEI : 286-2)  
Dimensions: millimeters (inches)

### • Bulk

Suffix	- -	LG	KB	KC	KE	KH	KK	K3	K7
Leads Length	6mm $+0/-1$	3.2mm $\pm 0.4$	3.5mm $\pm 0.5$	4mm $\pm 0.5$	5mm $\pm 0.5$	9mm $\pm 0.5$	15mm $\pm 0.5$	20mm $\pm 1$	25mm $\pm 1$

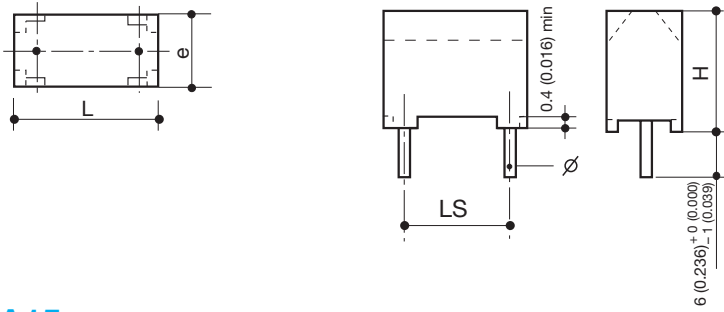
Standard Suffix: - -  
Special MOQ for these special suffix



# BA 15/22/27



Pitch = 15mm



## BA15

Pitch mm	Ordering Code	Vr-/Vr~	Cr	Case	Dimensions (mm)			MOQ		∅ +10% -0.5 mm	I <sup>2</sup> t (A <sup>2</sup> .sec)	I <sub>rms</sub> (A)	
					L max	H max	e max	Reel	Bulk <sup>(1)</sup>				
15	BA156K0332+-	630/350	3.3nF	6	17.7	10.6	5.2	4000	6000	0.8	5.81 x 10 <sup>-4</sup>	0.30	
15	BA156K0472+-		4.7nF	6	17.7	10.6	5.2	4000	6000	0.8	9.43 x 10 <sup>-4</sup>	0.39	
15	BA156K0682+-		6.8nF	8	17.7	13.6	6.7	3332	6000	0.8	1.09 x 10 <sup>-3</sup>	0.48	
15	BA156K0103+-		10nF	8	17.7	13.6	6.7	3332	6000	0.8	2.35 x 10 <sup>-3</sup>	0.71	
15	BA156K0223+-		22nF	9	17.7	14.6	8.7	2500	8000	0.8	1.14 x 10 <sup>-2</sup>	1.55	
15	BA156K0333+-		33nF	10	17.7	16.6	10.2		3600	0.8	2.56 x 10 <sup>-2</sup>	2.33	
15	BA156K0393+-	39nF	10	17.7	16.6	10.2		3600	0.8	3.58 x 10 <sup>-2</sup>	2.74		
15	BA156L0102+-	1000/450	1nF	6	17.7	10.6	5.2	4000	6000	0.8	1.07 x 10 <sup>-4</sup>	0.21	
15	BA156L0152+-		1.5nF	6	17.7	10.6	5.2	4000	6000	0.8	2.40 x 10 <sup>-4</sup>	0.33	
15	BA156L0222+-		2.2nF	6	17.7	10.6	5.2	4000	6000	0.8	4.30 x 10 <sup>-4</sup>	0.40	
15	BA156L0332+-		3.3nF	6	17.7	10.6	5.2	4000	6000	0.8	5.81 x 10 <sup>-4</sup>	0.40	
15	BA156L0472+-		4.7nF	6	17.7	10.6	5.2	4000	6000	0.8	9.43 x 10 <sup>-4</sup>	0.50	
15	BA156L0682+-		6.8nF	8	17.7	13.6	6.7	3332	6000	0.8	1.97 x 10 <sup>-3</sup>	0.63	
15	BA156L0103+-		10nF	8	17.7	13.6	6.7	3332	6000	0.8	4.27 x 10 <sup>-3</sup>	0.92	
15	BA156L0153+-		15nF	9	17.7	14.6	8.7	2500	8000	0.8	9.60 x 10 <sup>-3</sup>	1.38	
15	BA156L0223+-		22nF	10	17.7	16.6	10.2		3600	0.8	2.07 x 10 <sup>-2</sup>	2.03	
15	BA156L0273+-		27nF	10	17.7	16.6	10.2		3600	0.8	3.11 x 10 <sup>-2</sup>	2.50	
15	BA156M0102+-		1600/550	1nF	6	17.7	10.6	5.2	4000	6000	0.8	1.07 x 10 <sup>-4</sup>	0.21
15	BA156M0152+-			1.5nF	6	17.7	10.6	5.2	4000	6000	0.8	2.41 x 10 <sup>-4</sup>	0.33
15	BA156M0222+-	2.2nF		6	17.7	10.6	5.2	4000	6000	0.8	5.18 x 10 <sup>-4</sup>	0.45	
15	BA156M0332+-	3.3nF		8	17.7	13.6	6.7	3332	6000	0.8	1.17 x 10 <sup>-3</sup>	0.62	
15	BA156M0472+-	4.7nF		8	17.7	13.6	6.7	3332	6000	0.8	2.36 x 10 <sup>-3</sup>	0.88	
15	BA156M0682+-	6.8nF		9	17.7	14.6	8.7	2500	8000	0.8	4.95 x 10 <sup>-3</sup>	1.28	
15	BA156M0103+-	10nF		10	17.7	16.6	10.2		3600	0.8	1.07 x 10 <sup>-2</sup>	1.89	
15	BA156M0123+-	12nF		10	17.7	16.6	10.2		3600	0.8	1.54 x 10 <sup>-2</sup>	2.25	
15	BA156N0102+-	2000/650		1nF	6	17.7	10.6	5.2	4000	6000	0.8	1.81 x 10 <sup>-4</sup>	0.26
15	BA156N0152+-			1.5nF	6	17.7	10.6	5.2	4000	6000	0.8	4.14 x 10 <sup>-4</sup>	0.38
15	BA156N0222+-		2.2nF	8	17.7	13.6	6.7	3332	6000	0.8	8.92 x 10 <sup>-4</sup>	0.58	
15	BA156N0332+-		3.3nF	8	17.7	13.6	6.7	3332	6000	0.8	2.00 x 10 <sup>-3</sup>	0.86	
15	BA156N0472+-		4.7nF	9	17.7	14.6	8.7	2500	8000	0.8	4.07 x 10 <sup>-3</sup>	1.22	
15	BA156N0682+-		6.8nF	10	17.7	16.6	10.2		3600	0.8	8.52 x 10 <sup>-3</sup>	1.77	
15	BA156N0822+-		8.2nF	10	17.7	16.6	10.2		3600	0.8	1.24 x 10 <sup>-2</sup>	2.14	

Replace the + by the tolerance code: J=5% - K=10%

Replace the - - by the packaging suffix: - - = standard bulk - EN = taping on reel etc

<sup>(1)</sup>: MOQ for standard bulk suffix - -

# BA 15/22/27



Pitch = 22.5mm/27.5mm

## BA22

Pitch = 22.5mm

Pitch mm	Ordering Code	Vr-/Vr~	Cr	Case	Dimensions (mm)			MOQ		∅ +10% -0.5 mm	I <sup>2</sup> t (A <sup>2</sup> .sec)	I <sub>rms</sub> (A)
					L max	H max	e max	Reel	Bulk <sup>(1)</sup>			
22.5	BA226K0363+-	630/350	36nF	12	26.7	17.6	7.7		1600	0.8	2.29 x 10 <sup>-2</sup>	1.39
22.5	BA226K0473+-		47nF	12	26.7	17.6	7.7		1600	0.8	3.90 x 10 <sup>-2</sup>	1.81
22.5	BA226K0683+-		68nF	13	26.7	19.6	10.2		1200	0.8	8.15 x 10 <sup>-2</sup>	2.63
22.5	BA226K0104+-		100nF	23	26.7	21.6	12.7		960	0.8	1.76 x 10 <sup>-1</sup>	3.86
22.5	BA226K0204+-		200nF	24	26.7	25.6	15.2		1600	0.8	7.05 x 10 <sup>-1</sup>	7.72
22.5	BA226L0243+-	1000/450	24nF	12	26.7	17.6	7.7		1600	0.8	1.57 x 10 <sup>-2</sup>	1.15
22.5	BA226L0333+-		33nF	12	26.7	17.6	7.7		1600	0.8	2.97 x 10 <sup>-2</sup>	1.57
22.5	BA226L0473+-		47nF	13	26.7	19.6	10.2		1200	0.8	6.02 x 10 <sup>-2</sup>	2.24
22.5	BA226L0683+-		68nF	23	26.7	21.6	12.7		960	0.8	1.26 x 10 <sup>-1</sup>	3.24
22.5	BA226L0104+-		100nF	24	26.7	25.6	15.2		1600	0.8	2.73 x 10 <sup>-1</sup>	3.98
22.5	BA226L0154+-		150nF	24	26.7	25.6	15.2		1600	0.8	3.15 x 10 <sup>-1</sup>	7.14
22.5	BA226M0103+-	1600/550	10nF	12	26.7	17.6	7.7		1600	0.8	6.82 x 10 <sup>-3</sup>	0.97
22.5	BA226M0223+-		22nF	13	26.7	19.6	10.2		1200	0.8	3.30 x 10 <sup>-2</sup>	2.14
22.5	BA226M0333+-		33nF	23	26.7	21.6	12.7		960	0.8	7.42 x 10 <sup>-2</sup>	3.21
22.5	BA226M0473+-		47nF	23	26.7	21.6	12.7		960	0.8	1.51 x 10 <sup>-1</sup>	4.58
22.5	BA226M0683+-		68nF	24	26.7	25.6	15.2		1600	0.8	3.15 x 10 <sup>-1</sup>	6.61
22.5	BA226N0562+-	2000/650	5.6nF	12	26.7	17.6	7.7		1600	0.8	3.01 x 10 <sup>-3</sup>	0.70
22.5	BA226N0682+-		6.8nF	12	26.7	17.6	7.7		1600	0.8	4.44 x 10 <sup>-3</sup>	0.85
22.5	BA226N0103+-		10nF	12	26.7	17.6	7.7		1600	0.8	9.60 x 10 <sup>-3</sup>	1.25
22.5	BA226N0223+-		22nF	13	26.7	19.6	10.2		1200	0.8	4.65 x 10 <sup>-2</sup>	2.76
22.5	BA226N0333+-		33nF	23	26.7	21.6	12.7		960	0.8	1.05 x 10 <sup>-1</sup>	4.14
22.5	BA226N0473+-		47nF	24	26.7	25.6	15.2		1600	0.8	2.12 x 10 <sup>-1</sup>	5.90
22.5	BA226N0563+-		56nF	24	26.7	25.6	15.2		1600	0.8	3.01 x 10 <sup>-1</sup>	7.02

Replace the + by the tolerance code: J=5% - K=10%  
 Replace the - - by the packaging suffix: - - = standard bulk - EN = taping on reel etc  
 (1): MOQ for standard bulk suffix - -

## BA27

Pitch = 27.5mm

Pitch mm	Ordering Code	Vr-/Vr~	Cr	Case	Dimensions (mm)			MOQ		∅ +10% -0.5 mm	I <sup>2</sup> t (A <sup>2</sup> .sec)	I <sub>rms</sub> (A)
					L max	H max	e max	Reel	Bulk <sup>(1)</sup>			
27.5	BA276K0683+-	630/350	68nF	16	31.7	19.6	10.2		960	0.8	2.53 x 10 <sup>-2</sup>	1.99
27.5	BA276K0104+-		100nF	16	31.7	19.6	10.2		960	0.8	5.47 x 10 <sup>-2</sup>	2.92
27.5	BA276K0224+-		220nF	18	31.7	26.2	15.2		1280	0.8	2.65 x 10 <sup>-1</sup>	6.42
27.5	BA276K0334+-		330nF	19	31.7	30.2	17.7		1040	0.8	5.96 x 10 <sup>-1</sup>	9.63
27.5	BA276K0394+-		390nF	19	31.7	30.2	17.7		1040	0.8	8.32 x 10 <sup>-1</sup>	11.39
27.5	BA276L0473+-	1000/450	47nF	16	31.7	19.6	10.2		960	0.8	2.67 x 10 <sup>-2</sup>	1.67
27.5	BA276L0683+-		68nF	16	31.7	19.6	10.2		960	0.8	5.59 x 10 <sup>-2</sup>	2.41
27.5	BA276L0104+-		100nF	P0	31.7	22.6	13.7		1600	0.8	1.21 x 10 <sup>-1</sup>	3.55
27.5	BA276L0224+-		220nF	18	31.7	26.2	15.2		1280	0.8	5.85 x 10 <sup>-1</sup>	7.79
27.5	BA276L0304+-		300nF	19	31.7	30.2	17.7		1040	0.8	1.09 x 10 <sup>0</sup>	10.63
27.5	BA276M0303+-	1600/550	30nF	16	31.7	19.6	10.2		960	0.8	2.72 x 10 <sup>-2</sup>	2.18
27.5	BA276M0333+-		33nF	16	31.7	19.6	10.2		960	0.8	3.29 x 10 <sup>-2</sup>	2.39
27.5	BA276M0473+-		47nF	16	31.7	19.6	10.2		960	0.8	6.68 x 10 <sup>-2</sup>	3.39
27.5	BA276M0683+-		68nF	P0	31.7	22.6	13.7		1600	0.8	1.40 x 10 <sup>-1</sup>	4.92
27.5	BA276M0104+-		100nF	18	31.7	26.2	15.2		1280	0.8	3.02 x 10 <sup>-1</sup>	7.23
27.5	BA276M0154+-	150nF	19	31.7	30.2	17.7		1040	0.8	6.80 x 10 <sup>-1</sup>	10.85	
27.5	BA276N0153+-	2000/650	15nF	16	31.7	19.6	10.2		960	0.8	9.07 x 10 <sup>-3</sup>	1.00
27.5	BA276N0223+-		22nF	16	31.7	19.6	10.2		960	0.8	1.95 x 10 <sup>-2</sup>	2.02
27.5	BA276N0333+-		33nF	16	31.7	19.6	10.2		960	0.8	4.39 x 10 <sup>-2</sup>	3.70
27.5	BA276N0473+-		47nF	P0	31.7	22.6	13.7		1600	0.8	8.90 x 10 <sup>-2</sup>	4.35
27.5	BA276N0683+-		68nF	18	31.7	26.2	15.2		1280	0.8	1.86 x 10 <sup>-1</sup>	5.90
27.5	BA276N0104+-		100nF	19	31.7	30.2	17.7		1040	0.8	4.03 x 10 <sup>-1</sup>	8.68
27.5	BA276N0124+-		120nF	19	31.7	30.2	17.7		1040	0.8	5.80 x 10 <sup>-1</sup>	10.41

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