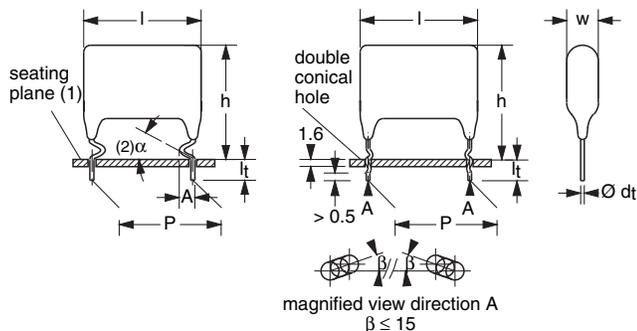


## Polyester Film Capacitors KT Radial Epoxy Lacquered Type



### Dimensions in mm

- (1) Hole  $\varnothing$  0.8 mm for  $d_t$  0.6 mm  
Hole  $\varnothing$  1.0 mm for  $d_t$  = 0.8 mm  
(2)  $0 \leq \alpha < 50^\circ$   
(3)  $A = 2.0 \text{ mm} \pm 0.5 \text{ mm}$  (pitch = 10.0 mm)  
 $A = 3.5 \text{ mm} \pm 1.0 \text{ mm}$  (pitch = 15.0 mm)

### APPLICATIONS

Consumer and industrial. Especially where high currents and/or steep pulses occur. DC or AC voltage

### MARKING

Manufacturer emblem; C-value; tolerance; rated voltage; code for dielectric material; code for factory of origin

### DIELECTRIC

Polyester film

### ELECTRODES

Aluminum foil

### COATING

Flame retardant epoxy material (UL-class 94 V-0)

### CONSTRUCTION

Film/foil mono construction

### LEADS

Tinned wire

### FEATURES

- 10 mm to 15 mm lead pitch
- Supplied loose in box
- Compliant to RoHS Directive 2002/95/EC

### CAPACITANCE RANGE (E12 SERIES)

0.001  $\mu\text{F}$  to 0.47  $\mu\text{F}$

### CAPACITANCE TOLERANCE

$\pm 20 \%$ ;  $\pm 10 \%$

### RATED (DC) VOLTAGE

100 V; 250 V; 400 V; 630 V

### RATED (AC) VOLTAGE

50 V; 80 V; 125 V; 200 V

### CLIMATIC CATEGORY

40/100/21

### RATED TEMPERATURE

85  $^\circ\text{C}$

### MAXIMUM APPLICATION TEMPERATURE

100  $^\circ\text{C}$

### REFERENCE SPECIFICATIONS

IEC 60384-11

### PERFORMANCE GRADE

Grade 1 (long life)

### DETAIL SPECIFICATION

For more detailed data and test requirements contact:

[dc-film@vishay.com](mailto:dc-film@vishay.com)



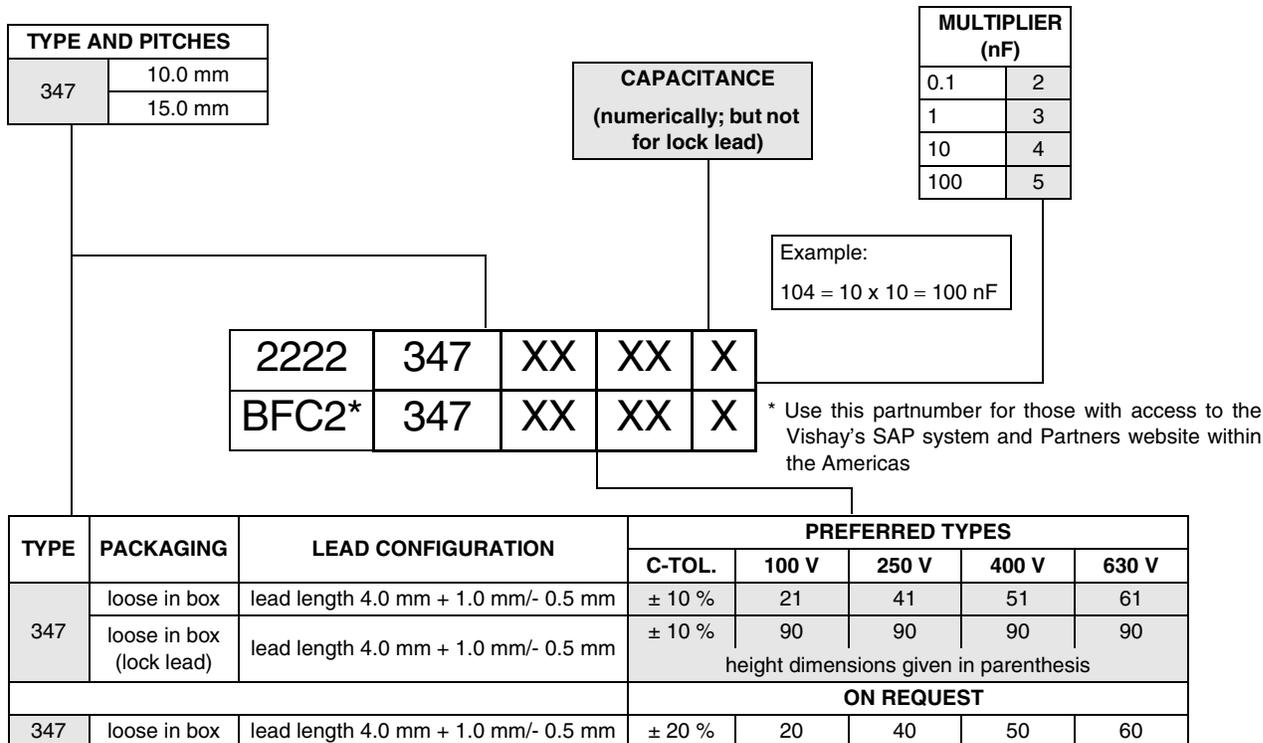
RoHS  
COMPLIANT



Polyester Film Capacitors  
KT Radial Epoxy Lacquered Type

Vishay BCcomponents

COMPOSITION OF CATALOG NUMBER



SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE			
	at 1 kHz		at 10 kHz	
Tangent of loss angle: C ≤ 0.47 μF	≤ 60 x 10 <sup>-4</sup>		≤ 110 x 10 <sup>-4</sup>	
Rated voltage pulse slope (dU/dt) <sub>R</sub>	at 100 V <sub>DC</sub>	at 250 V <sub>DC</sub>	at 400 V <sub>DC</sub>	at 630 V <sub>DC</sub>
	10 000 V/μs	10 000 V/μs	10 000 V/μs	10 000 V/μs
R between leads, for C ≤ 0.33 μF at 100 V; 1 min	> 50 000 MΩ	> 50 000 MΩ	> 50 000 MΩ	> 50 000 MΩ
RC between leads, for C > 0.33 μF at 100 V; 1 min	> 16 500 s	> 16 500 s		
R between interconnected leads and case (foil method)	> 30 000 MΩ			
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	200 V; 1 min	500 V; 1 min	800 V; 1 min	1260 V; 1 min
Withstanding (DC) voltage between leads and case	200 V; 1 min	500 V; 1 min	800 V; 1 min	1260 V; 1 min



$U_{RDC} = 100\text{ V}$ ;  $U_{RAC} = 50\text{ V}$ ;  $U_{p-p} = 140\text{ V}$

C ( $\mu\text{F}$ )	DIMENSIONS $w_{max.} \times h_{max.} \times l_{max.}$ (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; $l_t = 4.0\text{ mm} + 1.0\text{ mm}/- 0.5\text{ mm}$			
			C-tol = $\pm 10\%$ last 5 digits of catalog number	SPQ	C-tol = $\pm 10\%$ last 5 digits of catalog number	SPQ
PITCH = 10.0 mm $\pm$ 0.4 mm; $d_t = 0.60\text{ mm} \pm 0.06\text{ mm}$			LOCK LEAD			
0.015	5.5 x 13.0 (16.0) x 13.5	0.7	21153	1250	90238	1250
0.018			21183		90239	
0.022			21223		90241	
0.027			21273		90242	
0.033	6.0 x 13.5 (16.5) x 13.5	0.7	21333	2000	90236	2000
0.039	6.5 x 14.0 (17.0) x 13.5	0.8	21393	1750	90243	1750
0.047	7.0 x 14.5 (17.5) x 13.5	0.9	21473	1750	90244	1750
PITCH = 15.0 mm $\pm$ 0.4 mm; $d_t = 0.80\text{ mm} \pm 0.08\text{ mm}$			LOCK LEAD			
0.056	5.5 x 14.0 (17.0) x 19.0	1.2	21563	1500	90245	1500
0.068	6.0 x 14.5 (17.5) x 19.0	1.3	21683	1500	90235	1500
0.082	7.0 x 15.5 (18.5) x 19.0	1.5	21823	1250	90212	1250
0.100	7.5 x 16.0 (19.0) x 19.0	1.7	21104	1000	90224	1000
0.120	8.0 x 16.5 (19.5) x 19.0	1.9	21124	1000	90246	1000
0.150	8.5 x 17.0 (20.0) x 19.0	2.3	21154	900	90247	900

$U_{RDC} = 250\text{ V}$ ;  $U_{RAC} = 80\text{ V}$ ;  $U_{p-p} = 225\text{ V}$

C ( $\mu\text{F}$ )	DIMENSIONS $w_{max.} \times h_{max.} \times l_{max.}$ (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; $l_t = 4.0\text{ mm} + 1.0\text{ mm}/- 0.5\text{ mm}$			
			C-tol = $\pm 10\%$ LAST 5 DIGITS OF CATALOG NUMBER	SPQ	C-tol = $\pm 10\%$ LAST 5 DIGITS OF CATALOG NUMBER	SPQ
PITCH = 10.0 mm $\pm$ 0.4 mm; $d_t = 0.60\text{ mm} \pm 0.06\text{ mm}$			LOCK LEAD			
0.0082	5.5 x 13.0 (16.0) x 13.5	0.7	41822	2000	90255	1250
0.010			41103		90256	
0.012			41123		90257	
0.015			41153		90258	
0.018	6.0 x 13.5 (16.5) x 13.5	0.7	41183	2000	90259	2000
0.022	6.5 x 14.0 (17.0) x 13.5	0.8	41223	2000	90225	1750
0.027	7.0 x 14.5 (17.5) x 13.5	0.9	41273	2000	90261	1750
PITCH = 15.0 mm $\pm$ 0.4 mm; $d_t = 0.80\text{ mm} \pm 0.08\text{ mm}$			LOCK LEAD			
0.033	5.5 x 14.0 (17.0) x 19.0	1.1	41333	2000	90213	1500
0.039	6.0 x 14.5 (17.5) x 19.0	1.3	41393	2000	90262	1500
0.047	7.0 x 15.5 (18.5) x 19.0	1.4	41473	2000	90214	1250
0.056	7.5 x 16.0 (19.0) x 19.0	1.6	41563	2000	90226	1000
0.068	8.0 x 16.5 (19.5) x 19.0	1.8	41683	2000	90234	1000
0.082	8.5 x 17.0 (20.0) x 19.0	2.1	41823	1000	90263	900



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$U_{RDC} = 400\text{ V}$ ;  $U_{RAC} = 125\text{ V}$ ;  $U_{p-p} = 350\text{ V}$

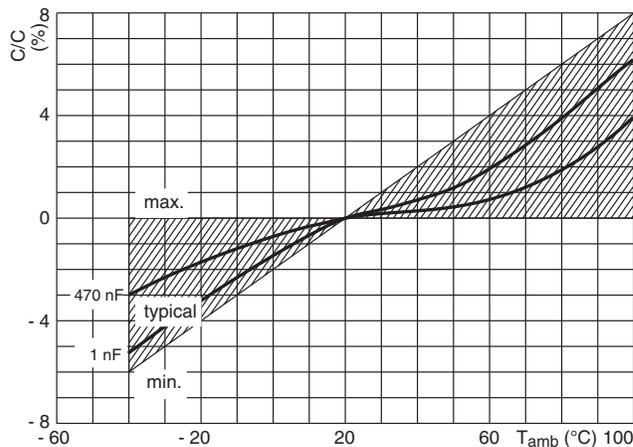
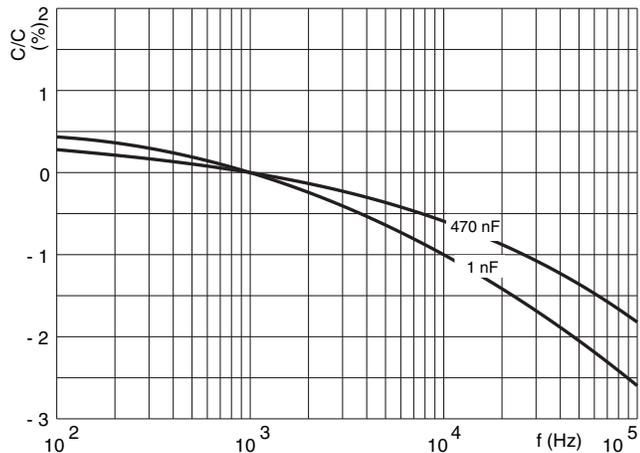
C ( $\mu\text{F}$ )	DIMENSIONS $w_{\text{max.}} \times h_{\text{max.}} \times l_{\text{max.}}$ (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; $l_t = 4.0\text{ mm} + 1.0\text{ mm}/- 0.5\text{ mm}$			
			C-tol = $\pm 10\%$	SPQ	C-tol = $\pm 10\%$	SPQ
LAST 5 DIGITS OF CATALOG NUMBER	LAST 5 DIGITS OF CATALOG NUMBER					
<b>PITCH = 10.0 mm <math>\pm</math> 0.4 mm; <math>d_t = 0.60\text{ mm} \pm 0.06\text{ mm}</math></b>			<b>LOCK LEAD</b>			
0.0047	5.5 x 13.0 (16.0) x 13.5	0.7	51472	2000	90237	1250
0.0056			51562		90267	
0.0068			51682		90268	
0.0082			51822		90269	
0.010	6.0 x 13.5 (16.5) x 13.5	0.7	51103	2000	90218	2000
0.012	6.5 x 14.0 (17.0) x 13.5	0.8	51123	2000	90221	1750
0.015	7.0 x 14.5 (17.5) x 13.5	0.9	51153	2000	90219	1750
<b>PITCH = 15.0 mm <math>\pm</math> 0.4 mm; <math>d_t = 0.80\text{ mm} \pm 0.08\text{ mm}</math></b>			<b>LOCK LEAD</b>			
0.018	5.5 x 14.0 (17.0) x 19.0	1.1	51183	2000	90222	1500
0.022	6.0 x 14.5 (17.5) x 19.0	1.2	51223	2000	90223	1500
0.027	7.0 x 15.5 (18.5) x 19.0	1.4	51273	2000	90232	1250
0.033	7.5 x 16.0 (19.0) x 19.0	1.6	51333	2000	90227	1000
0.039	8.0 x 16.5 (19.5) x 19.0	1.8	51393	2000	90228	1000
0.047	8.5 x 17.0 (20.0) x 19.0	2.1	51473	1000	90229	900

$U_{RDC} = 630\text{ V}$ ;  $U_{RAC} = 200\text{ V}$ ;  $U_{p-p} = 560\text{ V}$

C ( $\mu\text{F}$ )	DIMENSIONS $w_{\text{max.}} \times h_{\text{max.}} \times l_{\text{max.}}$ (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; $l_t = 4.0\text{ mm} + 1.0\text{ mm}/- 0.5\text{ mm}$			
			C-tol = $\pm 10\%$	SPQ	C-tol = $\pm 10\%$	SPQ
LAST 5 DIGITS OF CATALOG NUMBER	LAST 5 DIGITS OF CATALOG NUMBER					
<b>PITCH = 10.0 mm <math>\pm</math> 0.4 mm; <math>d_t = 0.60\text{ mm} \pm 0.06\text{ mm}</math></b>			<b>LOCK LEAD</b>			
0.0010	5.5 x 13.0 (16.0) x 13.5	0.7	61102	2000	90276	1250
0.0012			61122		90277	
0.0015			61152		90278	
0.0018			61182		90279	
0.0022			61222		90281	
0.0027			61272		90282	
0.0033			61332		90283	
0.0039			61392		90284	
0.0047	6.0 x 13.5 (16.5) x 13.5	0.7	61472	2000	90285	2000
0.0056	6.5 x 14.0 (17.0) x 13.5	0.8	61562	2000	90286	1750
0.0068	7.0 x 14.5 (17.5) x 13.5	0.9	61682	2000	90287	1750
<b>PITCH = 15.0 mm <math>\pm</math> 0.4 mm; <math>d_t = 0.80\text{ mm} \pm 0.08\text{ mm}</math></b>			<b>LOCK LEAD</b>			
0.0082	5.5 x 14.0 (17.0) x 19.0	1.1	61822	2000	90288	1500
0.010	6.0 x 14.5 (17.5) x 19.0	1.2	61103	2000	90289	1500
0.012	7.0 x 15.5 (18.5) x 19.0	1.3	61123	2000	90291	1250
0.015	7.5 x 16.0 (19.0) x 19.0	1.5	61153	2000	90292	1000
0.018	8.0 x 16.5 (19.5) x 19.0	1.7	61183	2000	90293	1000
0.022	8.5 x 17.0 (20.0) x 19.0	2.0	61223	1000	90294	900



**CAPACITANCE**





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