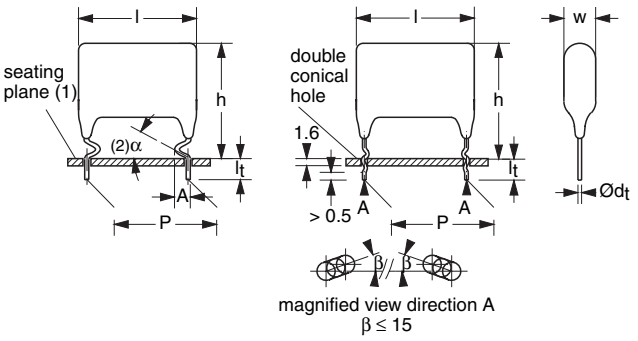
Polyester Film Capacitors
KT Radial Epoxy Lacquered Type



Dimensions in mm

(1) Hole ∅ 0.8 for d_t 0.6 mm
Hole ∅ 1.0 for d_t = 0.8 mm

(2) $0 \le \alpha < 50°$

(3) A = 2.0 ± 0.5 mm (pitch = 10.0 mm)
A = 3.5 ± 1.0 mm (pitch = 15.0 and 22.5 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 to 22.5 mm lead pitch. Supplied loose in box

Lead (Pb)-free product

RoHS-compliant product

RoHS COMPLIANT

CAPACITANCE RANGE (E12 SERIES)

0.001 to 0.47 µF

CAPACITANCE TOLERANCE

± 20 %; ± 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 °C

MAXIMUM APPLICATION TEMPERATURE

100 °C

REFERENCE SPECIFICATIONS

IEC 60384-11

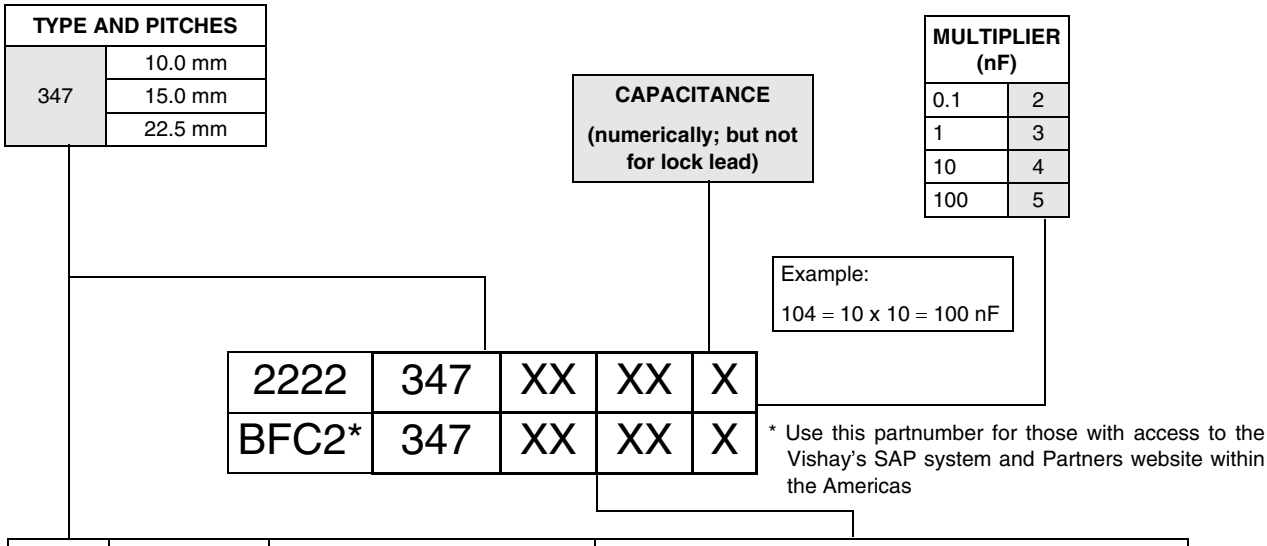
PERFORMANCE GRADE

Grade 1 (long life)

DETAIL SPECIFICATION

For more detailed data and test requirements contact:
filmcaps.roeselare@vishay.com

COMPOSITION OF CATALOG NUMBER



TYPE	PACKAGING	LEAD CONFIGURATION	PREFERRED TYPES				
			C-TOL	100 V	250 V	400 V	630 V
347	loose in box	lead length 4.0 + 1.0/– 0.5 mm	± 10 %	21	41	51	61
	loose in box (lock lead)	lead length 4.0 + 1.0/– 0.5 mm	± 10 %	90	90	90	90
			height dimensions given in parenthesis.				
			ON REQUEST				
347	loose in box	lead length 4.0 + 1.0/– 0.5 mm	± 20 %	20	40	50	60

SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE			
Tangent of loss angle:	at 1 kHz		at 10 kHz	
$C \leq 0.47$ µF	$\leq 60 \times 10^{-4}$		$\leq 110 \times 10^{-4}$	
Rated voltage pulse slope $(dU/dt)_R$	at 100 V (DC)	at 250 V (DC)	at 400 V (DC)	at 630 V (DC)
	10000 V/µs	10000 V/µs	10000 V/µs	10000 V/µs
R between leads, for $C \leq 0.33$ µF at 100 V; 1 minute	> 50000 MΩ	> 50000 MΩ	> 50000 MΩ	> 50000 MΩ
RC between leads, for $C > 0.33$ µF at 100 V; 1 minute	> 16500 s	> 16500 s		
R between interconnected leads and case (foil method)	> 30000 MΩ			
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	200 V; 1 minute	500 V; 1 minute	800 V; 1 minute	1260 V; 1 minute
Withstanding (DC) voltage between leads and case	200 V; 1 minute	500 V; 1 minute	800 V; 1 minute	1260 V; 1 minute

U_{Rdc} = 100 V; U_{Rac} = 50 V; U_{p-p} = 140 V

C (µF)	DIMENSIONS wmax × Hmax × Lmax (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; lt = 4.0 + 1.0/– 0.5 mm			
			C-tol = ± 10 %		C-tol = ± 10 %	
			last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ
Pitch = 10.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm					**lock lead**	
0.015	5.5 × 13.0 (16.0) × 13.5	0.7	21153	1250	90238	1250
0.018			21183		90239	
0.022			21223		90241	
0.027			21273		90242	
0.033	6.0 × 13.5 (16.5) × 13.5	0.7	21333	2000	90236	2000
0.039	6.5 × 14.0 (17.0) × 13.5	0.8	21393	1750	90243	1750
0.047	7.0 × 14.5 (17.5) × 13.5	0.9	21473	1750	90244	1750
Pitch = 15.0 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					**lock lead**	
0.056	5.5 × 14.0 (17.0) × 19.0	1.2	21563	1500	90245	1500
0.068	6.0 × 14.5 (17.5) × 19.0	1.3	21683	1500	90235	1500
0.082	7.0 × 15.5 (18.5) × 19.0	1.5	21823	1250	90212	1250
0.1	7.5 × 16.0 (19.0) × 19.0	1.7	21104	1000	90224	1000
0.12	8.0 × 16.5 (19.5) × 19.0	1.9	21124	1000	90246	1000
0.15	8.5 × 17.0 (20.0) × 19.0	2.3	21154	900	90247	900
Pitch = 22.5 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					**lock lead**	
0.18	7.5 × 18.0 (21.0) × 27.0	2.8	21184	800	90248	800
0.22	7.5 × 18.5 (21.5) × 27.0	3.2	21224	800	90249	800
0.27	8.0 × 19.5 (22.5) × 27.0	3.8	21274	500	90251	500
0.33	9.0 × 20.0 (23.0) × 27.0	4.4	21334	450	90252	450
0.39	10.0 × 21.0 (24.0) × 27.0	5.1	21394	400	90253	400
0.47	11.0 × 22.0 (25.0) × 27.0	6.0	21474	350	90254	350

U_{Rdc} = 250 V; U_{Rac} = 80 V; U_{p-p} = 225 V

C (µF)	DIMENSIONS wmax × Hmax × Lmax (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; lt = 4.0 + 1.0/– 0.5 mm			
			C-tol = ± 10 %		C-tol = ± 10 %	
			LAST 5 DIGITS OF CATALOG NUMBER	SPQ	LAST 5 DIGITS OF CATALOG NUMBER	SPQ
Pitch = 10.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm					**lock lead**	
0.0082	5.5 × 13.0 (16.0) × 13.5	0.7	41822	2000	90255	1250
0.01			41103		90256	
0.012			41123		90257	
0.015			41153		90258	
0.018	6.0 × 13.5 (16.5) × 13.5	0.7	41183	2000	90259	2000
0.022	6.5 × 14.0 (17.0) × 13.5	0.8	41223	2000	90225	1750
0.027	7.0 × 14.5 (17.5 × 13.5	0.9	41273	2000	90261	1750
Pitch = 15.0 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					**lock lead**	
0.033	5.5 × 14.0 (17.0) × 19.0	1.1	41333	2000	90213	1500
0.039	6.0 × 14.5 (17.5) × 19.0	1.3	41393	2000	90262	1500
0.047	7.0 × 15.5 (18.5) × 19.0	1.4	41473	2000	90214	1250
0.056	7.5 × 16.0 (19.0) × 19.0	1.6	41563	2000	90226	1000
0.068	8.0 × 16.5 (19.5) × 19.0	1.8	41683	2000	90234	1000

C (µF)	DIMENSIONS wmax × Hmax × Lmax (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; lt = 4.0 + 1.0/– 0.5 mm			
			C-tol = ± 10 %		C-tol = ± 10 %	
			LAST 5 DIGITS OF CATALOG NUMBER	SPQ	LAST 5 DIGITS OF CATALOG NUMBER	SPQ
0.082	8.5 × 17.0 (20.0) × 19.0	2.1	41823	1000	90263	900
Pitch = 22.5 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					**lock lead**	
0.1	7.5 × 18.0 (21.0) × 27.0	2.7	41104	1000	90215	800
0.12	7.5 × 18.5 (21.5) × 27.0	3.0	41124	1000	90264	800
0.15	8.0 × 19.5 (22.5) × 27.0	3.5	41154	500	90216	500
0.18	9.0 × 20.0 (23.0) × 27.0	4.0	41184	500	90265	450
0.22	10.0 × 21.0 (24.0) × 27.0	4.5	41224	500	90217	400
0.27	11.0 × 22.0 (25.0) × 27.0	5.3	41274	500	90266	350

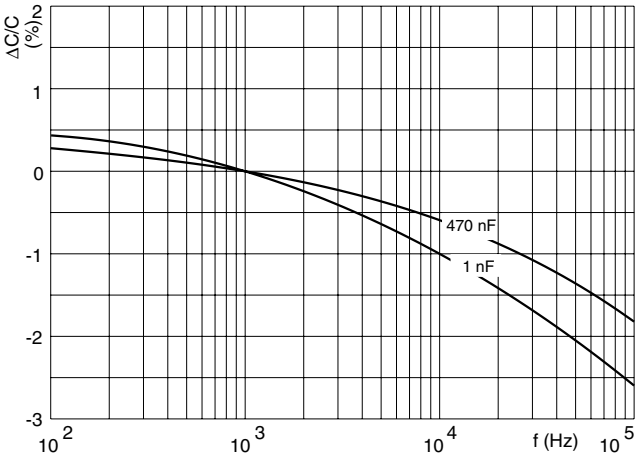
U_{Rdc} = 400 V; U_{Rac} = 125 V; U_{p-p} = 350 V

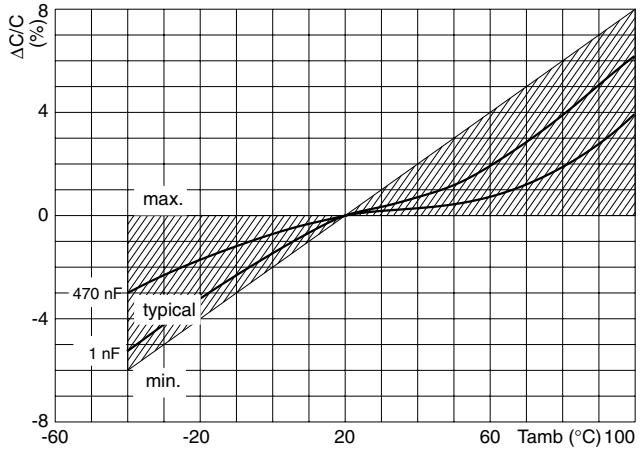
C (µF)	DIMENSIONS wmax × Hmax × Lmax (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; lt = 4.0 + 1.0/– 0.5 mm			
			C-tol = ± 10 %		C-tol = ± 10 %	
			LAST 5 DIGITS OF CATALOG NUMBER	SPQ	LAST 5 DIGITS OF CATALOG NUMBER	SPQ
Pitch = 10.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm					**lock lead**	
0.0047	5.5 × 13.0 (16.0) × 13.5	0.7	51472	2000	90237	1250
0.0056			51562		90267	
0.0068			51682		90268	
0.0082			51822		90269	
0.01	6.0 × 13.5 (16.5) × 13.5	0.7	51103	2000	90218	2000
0.012	6.5 × 14.0 (17.0) × 13.5	0.8	51123	2000	90221	1750
0.015	7.0 × 14.5 (17.5) × 13.5	0.9	51153	2000	90219	1750
Pitch = 15.0 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					**lock lead**	
0.018	5.5 × 14.0 (17.0) × 19.0	1.1	51183	2000	90222	1500
0.022	6.0 × 14.5 (17.5) × 19.0	1.2	51223	2000	90223	1500
0.027	7.0 × 15.5 (18.5) × 19.0	1.4	51273	2000	90232	1250
0.033	7.5 × 16.0 (19.0) × 19.0	1.6	51333	2000	90227	1000
0.039	8.0 × 16.5 (19.5) × 19.0	1.8	51393	2000	90228	1000
0.047	8.5 × 17.0 (20.0) × 19.0	2.1	51473	1000	90229	900
Pitch = 22.5 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					**lock lead**	
0.056	7.5 × 18.0 (21.0) × 27.0	2.5	51563	1000	90231	800
0.068	7.5 × 18.5 (21.5) × 27.0	2.9	51683	1000	90271	800
0.082	8.0 × 19.5 (22.5) × 27.0	3.2	51823	500	90272	500
0.1	9.0 × 20.0 (23.0) × 27.0	3.8	51104	500	90273	450
0.12	10.0 × 21.0 (24.0) × 27.0	4.4	51124	500	90274	400
0.15	11.0 × 22.0 (25.0) × 27.0	5.2	51154	500	90275	350

U_{Rdc} = 630 V; U_{Rac} = 200 V; U_{p-p} = 560 V

C (µF)	DIMENSIONS wmax × Hmax × Lmax (mm)	MASS (g)	CATALOG NUMBER 2222 347 ..... AND PACKAGING			
			LOOSE IN BOX; lt = 4.0 + 1.0/– 0.5 mm			
			C-tol = ± 10 %		C-tol = ± 10 %	
			LAST 5 DIGITS OF CATALOG NUMBER	SPQ	LAST 5 DIGITS OF CATALOG NUMBER	SPQ
Pitch = 10.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm					**lock lead**	
0.001	5.5 × 13.0 (16.0) × 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 × 13.5 (16.5) × 13.5	0.7	61472	2000	90285	2000
0.0056	6.5 × 14.0 (17.0) × 13.5	0.8	61562	2000	90286	1750
0.0068	7.0 × 14.5 (17.5) × 13.5	0.9	61682	2000	90287	1750
Pitch = 15.0 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					**lock lead**	
0.0082	5.5 × 14.0 (17.0) × 19.0	1.1	61822	2000	90288	1500
0.01	6.0 × 14.5 (17.5) × 19.0	1.2	61103	2000	90289	1500
0.012	7.0 × 15.5 (18.5) × 19.0	1.3	61123	2000	90291	1250
0.015	7.5 × 16.0 (19.0) × 19.0	1.5	61153	2000	90292	1000
0.018	8.0 × 16.5 (19.5) × 19.0	1.7	61183	2000	90293	1000
0.022	8.5 × 17.0 (20.0) × 19.0	2.0	61223	1000	90294	900
Pitch = 22.5 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					**lock lead**	
0.027	7.5 × 18.0 (21.0) × 27.0	2.5	61273	1000	90295	800
0.033	7.5 × 18.5 (21.5) × 27.0	2.8	61333	1000	90233	800
0.039	8.0 × 19.5 (22.5) × 27.0	3.0	61393	500	90296	500
0.047	9.0 × 20.0 (23.0) × 27.0	3.5	61473	500	90297	450
0.056	10.0 × 21.0 (24.0) × 27.0	3.8	61563	500	90298	400
0.068	11.0 × 22.0 (25.0) × 27.0	4.4	61683	500	90299	350

CAPACITANCE





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