

Polyester Film Capacitors KT Radial Epoxy Lacquered Type

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



CAPACITANCE RANGE (E12 SERIES)

0.001 to 0.47 μ F

CAPACITANCE TOLERANCE

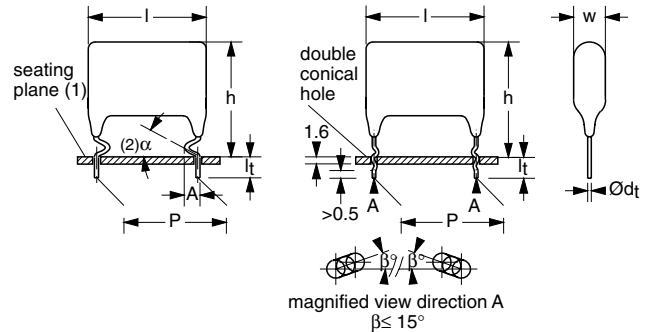
\pm 20%; \pm 10%

RATED (DC) VOLTAGE

100 V; 250 V; 400 V; 630 V

RATED (AC) VOLTAGE

50 V; 80 V; 125 V; 200 V



Dimensions in mm.

- (1) Hole \varnothing 0.8 for d_t 0.6 mm.
Hole \varnothing 1.0 for d_t = 0.8 mm.
- (2) $0 \leq \alpha < 50^\circ$.
- (3) $A = 2.0 \pm 0.5$ mm (pitch = 10.0 mm).
 $A = 3.5 \pm 1.0$ mm (pitch = 15.0 and 22.5 mm).

CLIMATIC CATEGORY

40/100/21

RATED TEMPERATURE

85 $^\circ$ C

MAXIMUM APPLICATION TEMPERATURE

100 $^\circ$ C

REFERENCE SPECIFICATIONS

IEC 60384-11

PERFORMANCE GRADE

Grade 1 (long life)

FEATURES

10 to 22.5 mm lead pitch. Supplied loose in box
Lead (Pb)-free product

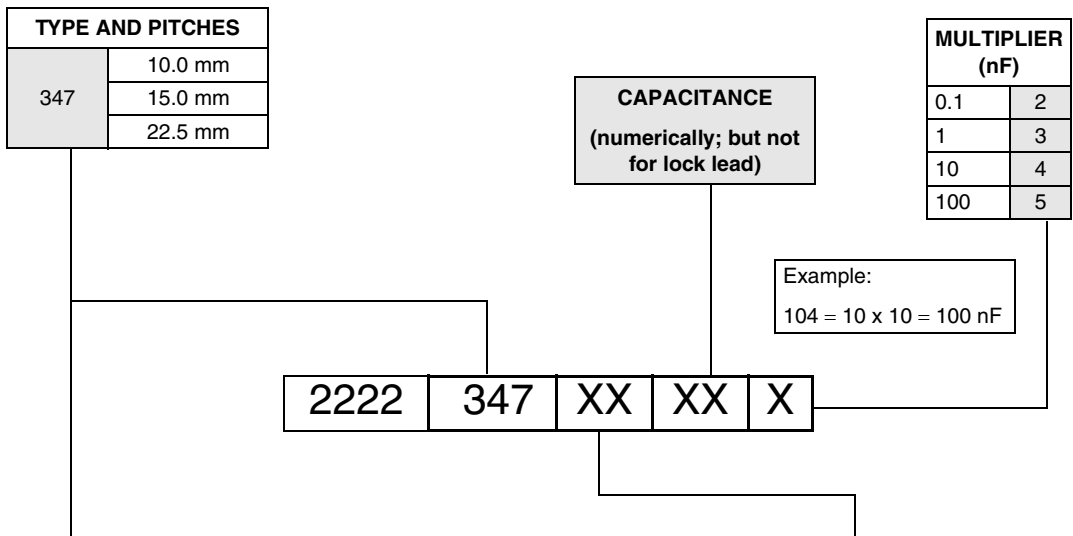


DETAIL SPECIFICATION

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			
	at 1 kHz		at 10 kHz	
Tangent of loss angle: $C \leq 0.47 \mu\text{F}$	$\leq 60 \times 10^{-4}$		$\leq 110 \times 10^{-4}$	
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 $C \leq 0.33 \mu\text{F}$ at 100 V; 1 minute	>50000 MΩ	>50000 MΩ	>50000 MΩ	>50000 MΩ
RC between leads, for $C > 0.33 \mu\text{F}$ 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



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

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

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

C (μF)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 347 AND PACKAGING			
			LOOSE IN BOX; $l_t = 4.0 +1.0/-0.5\text{ mm}$			
			C-tol = $\pm 10\%$	SPQ	C-tol = $\pm 10\%$	SPQ
			last 5 digits of catalog number		last 5 digits of catalog number	
Pitch = 10.0 ± 0.4 mm; $d_t = 0.60 \pm 0.06$ mm					lock lead	
0.0082	5.5 \times 13.0 (16.0) \times 13.5	0.7	41822	2000	90255	1250
0.01			41103		90256	
0.012			41123		90257	
0.015			41153		90258	
0.018	6.0 \times 13.5 (16.5) \times 13.5	0.7	41183	2000	90259	2000
0.022	6.5 \times 14.0 (17.0) \times 13.5	0.8	41223	2000	90225	1750
0.027	7.0 \times 14.5 (17.5) \times 13.5	0.9	41273	2000	90261	1750
Pitch = 15.0 ± 0.4 mm; $d_t = 0.80 \pm 0.08$ mm					lock lead	
0.033	5.5 \times 14.0 (17.0) \times 19.0	1.1	41333	2000	90213	1500
0.039	6.0 \times 14.5 (17.5) \times 19.0	1.3	41393	2000	90262	1500
0.047	7.0 \times 15.5 (18.5) \times 19.0	1.4	41473	2000	90214	1250



C (μ F)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 347 AND PACKAGING			
			LOOSE IN BOX; $l_t = 4.0 +1.0/-0.5$ mm			
			C-tol = $\pm 10\%$	SPQ	C-tol = $\pm 10\%$	SPQ
			last 5 digits of catalog number		last 5 digits of catalog number	
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
0.082	8.5 × 17.0 (20.0) × 19.0	2.1	41823	1000	90263	900
Pitch = 22.5 ±0.4 mm; $d_t = 0.80 \pm 0.08$ 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 (μ F)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 347 AND PACKAGING			
			LOOSE IN BOX; $l_t = 4.0 +1.0/-0.5$ mm			
			C-tol = $\pm 10\%$	SPQ	C-tol = $\pm 10\%$	SPQ
			last 5 digits of catalog number		last 5 digits of catalog number	
Pitch = 10.0 ±0.4 mm; $d_t = 0.60 \pm 0.06$ 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; $d_t = 0.80 \pm 0.08$ 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; $d_t = 0.80 \pm 0.08$ 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



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

C (μF)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 347 AND PACKAGING				
			LOOSE IN BOX; $l_t = 4.0 \pm 1.0 / -0.5\text{ mm}$				
			C-tol = $\pm 10\%$		SPQ	C-tol = $\pm 10\%$	
			last 5 digits of catalog number			last 5 digits of catalog number	
Pitch = $10.0 \pm 0.4\text{ mm}$; $d_t = 0.60 \pm 0.06\text{ mm}$					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 = $15.0 \pm 0.4\text{ mm}$; $d_t = 0.80 \pm 0.08\text{ mm}$					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 = $22.5 \pm 0.4\text{ mm}$; $d_t = 0.80 \pm 0.08\text{ mm}$					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

