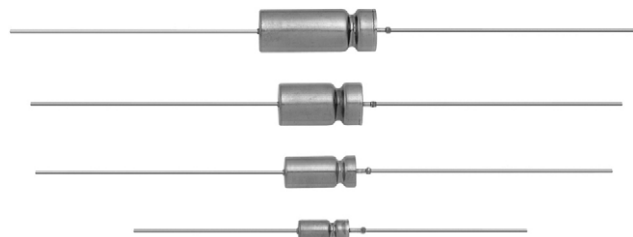


Wet Tantalum Capacitors Tantalum-Case With Glass-to-Tantalum Hermetic Seal for -55 °C to +125 °C Operation, Low ESR



LINKS TO ADDITIONAL RESOURCES



FEATURES

- Military specification MIL-PRF-39006/30 and 39006/31. model 136D capacitors are commercial equivalents of military style CLR90 and CLR91
- Capacitors to meet the MIL-specs must be ordered by M39006 part numbers shown in the relative specification
- Axial through-hole terminations: standard tin / lead (SnPb), 100 % tin (RoHS-compliant) available
- Standard and extended ratings
- Low ESR
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS*
Available


Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

PERFORMANCE CHARACTERISTICS

Operating Temperature: -55 °C to +85 °C
(to +125 °C with voltage derating)

Capacitance Tolerance: at 120 Hz, +25 °C. $\pm 20\%$ standard. $\pm 10\%$, $\pm 5\%$ available as special.

DC Leakage Current (DCL Max.): at +25 °C and above: leakage current shall not exceed the values listed in the Standard Ratings Tables.

Life Test: capacitors are capable of withstanding a 2000 h life test at a temperature of +85 °C or +125 °C at the applicable rated DC working voltage.

Following life test:

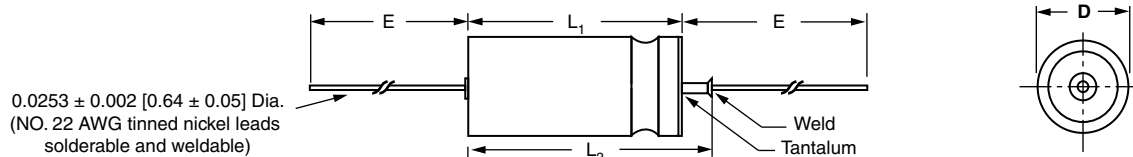
1. DCL, measured at +85 °C rated voltage, shall not be in excess of the original requirement.
2. The equivalent series resistance shall not exceed 150 % of the initial requirement.
3. Change in capacitance shall not exceed 10 % from the initial measurement.

ORDERING INFORMATION

136D MODEL	306 CAPACITANCE	X0 CAPACITANCE TOLERANCE	006 DC VOLTAGE RATING AT +85 °C	C CASE CODE	2 STYLE NUMBER	E3 RoHS- COMPLIANT
	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow	X0 = $\pm 20\%$ X9 = $\pm 10\%$ X5 = $\pm 5\%$	This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an "R" (6R3 = 6.3 V)	See Ratings and Case Codes table	Std. temperature (max. +125 °C) 0 = no insulating sleeve 2 = polyester insulation sleeve 3 = high temperature film insulation	E3 = 100 % tin termination (RoHS-compliant design) Blank = SnPb termination (standard design)

Note

- Packaging: the use of formed plastic trays for packaging these axial lead components is standard. Tape and reel is not available due to the unit weight

DIMENSIONS in inches [millimeters]


CASE CODE	DCLR 90 / 91 EQUIV.	D	L ₁	L ₂ (Max.)	E	WEIGHT (g) (Max.)
C	T1	0.188 ± 0.016 [4.78 ± 0.41]	0.453 + 0.031 / - 0.016 [11.51 + 0.79 / - 0.41]	0.734 [18.64]	1.500 ± 0.250 [38.10 ± 6.35]	2.6
F	T2	0.281 ± 0.016 [7.14 ± 0.41]	0.641 + 0.031 / - 0.016 [16.28 + 0.79 / - 0.41]	0.922 [23.42]	2.250 ± 0.250 [57.15 ± 6.35]	6.2
T	T3	0.375 ± 0.016 [9.53 ± 0.41]	0.766 + 0.031 / - 0.016 [19.46 + 0.79 / - 0.41]	1.047 [26.59]	2.250 ± 0.250 [57.15 ± 6.35]	11.6
K	T4	0.375 ± 0.016 [9.53 ± 0.41]	1.062 + 0.031 / - 0.016 [26.97 + 0.79 / - 0.41]	1.343 [34.11]	2.250 ± 0.250 [57.15 ± 6.35]	17.7

Note

- For insulated parts, add 0.015" [0.38] to the diameter. The insulation shall lap over the ends of the capacitor body.

RATINGS AND CASE CODES (Standard)

μF	6 V	8 V	10 V	15 V	25 V	30 V	35 V	50 V	60 V	75 V	100 V	125 V
1.7												C
2.5											C	
3.5										C		
3.6												C
4.0									C			
4.7											C	
5.0								C				
6.8										C		
8.0						C						
8.2									C			
9.0												F
10					C			C				
11											F	
14												F
15				C		C	C			F		
18												T
20			C						F			
22					C						F	
25		C						F			T	T
30	C										T	
33				C						F		
39									F			
40						F				T		
43											T	
47			C					F				
50					F				T			
56		C								T	K	K
60								T				
68	C					F	F		T			

**RATINGS AND CASE CODES** (Standard)

μF	6 V	8 V	10 V	15 V	25 V	30 V	35 V	50 V	60 V	75 V	100 V	125 V
70				F								
82								T				
86											K	
100			F		F	T						
110										K		
120		F		F	T							
140	F								K			
150						T						
160								K				
170				T								
180			F		T							
220		F										
250			T									
270	F			T			K					
290		T										
300						K						
330	T											
350					K							
390			T									
430		T										
540				K								
560	T											
750			K									
850		K										
1200	K											

RATINGS AND CASE CODES (Extended)

μF	6 V	8 V	10 V	15 V	25 V	30 V	35 V	40 V	50 V	60 V	63 V	75 V	100 V	125 V
6.8														C
10													C	
12												C		
18										C				
22												C		
27										C				F
33									C					
39							C	C					F	
47					C	C								T
56					C	C							T	T
68					C							F	T	K
82				C						F		F		K
100				C					F	F	F			
120			C				F		F				K	
150			C			F								
180		C			F							T		
220	C					F				T		K		
270				F	F				T	K				
300												K		
330							T		K	K				

**RATINGS AND CASE CODES (Extended)**

μF	6 V	8 V	10 V	15 V	25 V	30 V	35 V	40 V	50 V	60 V	63 V	75 V	100 V	125 V
370							K							
390			F	F		T								
470					T	T								
560	F		F		T	K								
680		F		T	K									
820	F			T										
1000				K										
1200	T		T											
1500	T	T	K											
1800		K												
2200	K													

STANDARD RATINGS

CAPACITANCE (μF)	CASE CODE	PART NUMBER ⁽¹⁾	MAX. ESR AT +25 °C 120 Hz (Ω)	MAX. IMP. AT -55 °C 120 Hz (Ω)	MAX. DCL (μA) AT +25 °C	+85 °C +125 °C	MAX. CAPACITANCE CHANGE (%) AT -55 °C	+85 °C	+125 °C	MAX. RIPPLE 40 kHz I _{RMS} (mA)
6 V_{DC} AT +85 °C; 4 V_{DC} AT +125 °C										
30	C	136D306X0006C2	1.99	100	1	2	-40	+10.5	+12	820
68	C	136D686X0006C2	1.58	60	1	2	-40	+14	+16	960
140	F	136D147X0006F2	0.99	40	1	3	-40	+14	+16	1200
270	F	136D277X0006F2	1.11	25	1	6.5	-44	+17.5	+20	1375
330	T	136D337X0006T2	0.73	20	2	7.9	-44	+14	+16	1800
560	T	136D567X0006T2	0.65	25	2	13	-64	+17.5	+20	1900
1200	K	136D128X0006K2	0.50	20	3	14	-80	+25	+25	2265
8 V_{DC} AT +85 °C; 5 V_{DC} AT +125 °C										
25	C	136D256X0008C2	1.99	100	1	2	-40	+10.5	+12	820
56	C	136D566X0008C2	1.66	59	1	2	-40	+14	+16	900
120	F	136D127X0008F2	1.11	50	1	2	-44	+17.5	+20	1230
220	F	136D227X0008F2	1.12	30	1	7	-44	+17.5	+20	1370
290	T	136D297X0008T2	0.78	25	2	6	-64	+17.5	+20	1770
430	T	136D437X0008T2	0.71	25	2	14	-64	+17.5	+20	1825
850	K	136D857X0008K2	0.47	22	4	16	-80	+25	+25	2330
10 V_{DC} AT +85 °C; 7 V_{DC} AT +125 °C										
20	C	136D206X0010C2	1.99	175	1	2	-32	+10.5	+12	820
47	C	136D476X0010C2	1.84	100	1	2	-36	+14	+16	855
100	F	136D107X0010F2	0.99	60	1	4	-36	+14	+16	1200
180	F	136D187X0010F2	1.11	40	1	7	-36	+14	+16	1365
250	T	136D257X0010T2	0.80	30	2	10	-40	+14	+16	1720
390	T	136D397X0010T2	0.75	25	2	16	-64	+17.5	+20	1800
750	K	136D757X0010K2	0.44	23	4	16	-80	+25	+25	2360

Note

(1) Part numbers listed are for units with ± 20 % capacitance tolerance insulated capacitors. For ± 10 % tolerance capacitors, change the digit following the letter "X" from "0" to "9"; for ± 5 %, change the digit following the letter "X" from "0" to "5". For capacitors without outer polyester-film insulation, change the last digit in the part number from "2" to "0". For capacitors with a high temperature insulating sleeve, change the last digit in the part number from "2" to "3". For RoHS compliant add "E3".



STANDARD RATINGS										
CAPACITANCE (μ F)	CASE CODE	PART NUMBER ⁽¹⁾	MAX. ESR AT +25 °C 120 Hz (Ω)	MAX. IMP. AT -55 °C 120 Hz (Ω)	MAX. DCL (μ A) AT		MAX. CAPACITANCE CHANGE (%) AT			MAX. RIPPLE 40 kHz I_{RMS} (mA)
					+25 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
15 V _{DC} AT +85 °C; 10 V _{DC} AT +125 °C										
15	C	136D156X0015C2	1.99	155	1	2	-24	+10.5	+12	780
33	C	136D336X0015C2	1.66	90	1	2	-28	+14	+16	820
70	F	136D706X0015F2	1.11	75	1	4	-28	+14	+16	1150
120	F	136D127X0015F2	1.12	50	1	7	-28	+17.5	+20	1450
170	T	136D177X0015T2	0.78	35	2	10	-32	+14	+16	1480
270	T	136D277X0015T2	0.71	30	2	16	-56	+17.5	+20	1740
540	K	136D547X0015K2	0.47	23	6	24	-80	+25	+25	2330
25 V _{DC} AT +85 °C; 15 V _{DC} AT +125 °C										
10	C	136D106X0025C2	2.66	220	1	2	-16	+8	+9	715
22	C	136D226X0025C2	1.99	140	1	2	-20	+10.5	+12	800
50	F	136D506X0025F2	1.46	70	1	2	-28	+13	+15	1130
100	F	136D107X0025F2	0.99	50	1	10	-28	+13	+15	1435
120	T	136D127X0025T2	1.16	38	2	6	-32	+13	+15	1450
180	T	136D187X0025T2	0.96	32	2	18	-48	+13	+15	1525
350	K	136D357X0025K2	0.67	24	7	28	-70	+25	+25	1970
30 V _{DC} AT +85 °C; 20 V _{DC} AT +125 °C										
8	C	136D805X0030C2	3.32	275	1	2	-16	+8	+12	640
15	C	136D156X0030C2	2.21	175	1	2	-20	+10.5	+12	780
40	F	136D406X0030F2	1.66	65	1	5	-24	+10.5	+12	1120
68	F	136D686X0030F2	1.27	60	1	8	-24	+13	+15	1285
100	T	136D107X0030T2	1.13	40	2	12	-28	+10.5	+12	1450
150	T	136D157X0030T2	1.02	35	2	18	-48	+13	+15	1525
300	K	136D307X0030K2	0.69	25	8	32	-60	+25	+25	1950
35 V _{DC} AT +85 °C; 22 V _{DC} AT +125 °C										
15	C	136D156X0035C2	3.10	175	0.75	1.5	-20	+10.5	+12	660
68	F	136D686X0035F2	1.45	60	1	2	-24	+13	+15	1195
270	K	136D277X0035K2	0.70	26	3	12	-58	+25	+25	1950
50 V _{DC} AT +85 °C; 30 V _{DC} AT +125 °C										
5	C	136D505X0050C2	3.98	400	1	2	-16	+5	+6	580
10	C	136D106X0050C2	2.66	250	1	2	-24	+8	+9	715
25	F	136D256X0050F2	2.13	95	1	5	-20	+10.5	+12	1005
47	F	136D476X0050F2	1.56	70	1	9	-28	+13	+15	1155
60	T	136D606X0050T2	1.33	45	2	12	-16	+10.5	+12	1335
82	T	136D826X0050T2	1.22	45	2	16	-32	+13	+15	1400
160	K	136D167X0050K2	0.71	27	8	32	-50	+25	+25	1900

Note

⁽¹⁾ Part numbers listed are for units with ± 20 % capacitance tolerance insulated capacitors. For ± 10 % tolerance capacitors, change the digit following the letter "X" from "0" to "9"; for ± 5 %, change the digit following the letter "X" from "0" to "5". For capacitors without outer polyester-film insulation, change the last digit in the part number from "2" to "0". For capacitors with a high temperature insulating sleeve, change the last digit in the part number from "2" to "3". For RoHS compliant add "E3".



STANDARD RATINGS

CAPACITANCE (μ F)	CASE CODE	PART NUMBER ⁽¹⁾	MAX. ESR	MAX. IMP.	MAX. DCL (μ A)		MAX. CAPACITANCE CHANGE			MAX.
			AT +25 °C	AT -55 °C	AT		AT			RIPPLE
			120 Hz	120 Hz	+25 °C	+85 °C	-55 °C	+85 °C	+125 °C	40 kHz
			(Ω)	(Ω)		+125 °C				I _{RMS} (mA)
60 V _{DC} AT +85 °C; 40 V _{DC} AT +125 °C										
4	C	136D405X0060C2	4.65	550	1	2	-16	+5	+6	525
8.2	C	136D825X0060C2	3.24	275	1	2	-24	+8	+9	625
20	F	136D206X0060F2	2.32	105	1	5	-16	+8	+12	930
39	F	136D396X0060F2	1.70	90	1	9	-28	+10.5	+12	1110
50	T	136D506X0060T2	1.33	50	2	12	-16	+10.5	+12	1330
68	T	136D686X0060T2	1.27	50	2	16	-32	+10.5	+15	1365
140	K	136D147X0060K2	0.76	28	8	32	-40	+20	+20	1850
75 V _{DC} AT +85 °C; 50 V _{DC} AT +125 °C										
3.5	C	136D355X0075C2	4.74	650	1	2	-16	+5	+6	525
6.8	C	136D685X0075C2	3.42	300	1	2	-20	+8	+9	610
15	F	136D156X0075F2	2.66	150	1	5	-16	+10.5	+9	890
33	F	136D336X0075F2	2.01	90	1	10	-24	+10.5	+15	1000
40	T	136D406X0075T2	1.50	60	2	12	-16	+10.5	+12	1250
56	T	136D566X0075T2	1.31	60	2	17	-28	+10.5	+15	1335
110	K	136D117X0075K2	0.73	29	9	36	-35	+20	+20	1850
100 V _{DC} AT +85 °C; 65 V _{DC} AT +125 °C										
2.5	C	136D255X0100C2	5.31	950	1	4	-16	+8	+8	505
4.7	C	136D475X0100C2	4.24	500	1	2	-16	+7	+8	565
11	F	136D116X0100F2	3.02	200	1	4	-16	+7	+8	835
22	F	136D226X0100F2	2.26	100	1	9	-16	+7	+8	965
25	T	136D256X0100T2	1.60	93	2	13	-16	+7	+8	1200
30	T	136D306X0100T2	1.55	80	2	12	-16	+8	+8	1240
43	T	136D436X0100T2	1.31	70	2	17	-20	+8	+8	1335
56	K	136D566X0100K2	0.80	32	10	40	-25	+15	+15	1800
86	K	136D866X0100K2	0.77	30	9	36	-25	+15	+15	1800
125 V _{DC} AT +85 °C; 85 V _{DC} AT +125 °C										
1.7	C	136D175X0125C2	7.81	1250	1	2	-16	+7	+8	415
3.6	C	136D365X0125C2	4.98	600	1	2	-16	+7	+8	520
9	F	136D905X0125F2	3.69	240	1	5	-16	+7	+8	755
14	F	136D146X0125F2	2.85	167	1	7	-16	+7	+8	860
18	T	136D186X0125T2	1.85	129	2	9	-16	+7	+8	1130
25	T	136D256X0125T2	1.59	93	2	13	-16	+7	+8	1200
56	K	136D566X0125K2	0.77	32	10	40	-25	+15	+15	1800

Note

⁽¹⁾ Part numbers listed are for units with $\pm 20\%$ capacitance tolerance insulated capacitors. For $\pm 10\%$ tolerance capacitors, change the digit following the letter "X" from "0" to "9"; for $\pm 5\%$, change the digit following the letter "X" from "0" to "5". For capacitors without outer polyester-film insulation, change the last digit in the part number from "2" to "0". For capacitors with a high temperature insulating sleeve, change the last digit in the part number from "2" to "3". For RoHS compliant add "E3".



EXTENDED RATINGS

CAPACITANCE (μ F)	CASE CODE	PART NUMBER ⁽¹⁾	MAX. ESR	MAX. IMP.	MAX. DCL (μ A)		MAX. CAPACITANCE CHANGE (%) AT			MAX. RIPPLE 40 kHz I_{RMS} (mA)
			AT +25 °C 120 Hz (Ω)	AT -55 °C 120 Hz (Ω)	AT		-55 °C	+85 °C	+125 °C	
					+25 °C	+85 °C +125 °C				
6 V _{DC} AT +85 °C; 4 V _{DC} AT +125 °C										
220	C	136D227X0006C2	1.50	36	2	9	-64	+13	+16	1000
560	F	136D567X0006F2	1.25	21	3	9	-77	+16	+20	1500
820	F	136D827X0006F2	1.25	18	3	14	-88	+16	+20	1500
1200	T	136D128X0006T2	0.75	18	5	18	-88	+20	+25	1900
1500	T	136D158X0006T2	0.75	18	5	20	-90	+20	+25	1900
2200	K	136D228X0006K2	0.50	13	6	24	-90	+25	+30	2300
8 V _{DC} AT +85 °C; 5 V _{DC} AT +125 °C										
180	C	136D187X0008C2	1.50	45	2	9	-60	+13	+16	1000
680	F	136D687X0008F2	1.25	22	3	14	-83	+16	+20	1500
1500	T	136D158X0008T2	0.75	18	5	20	-90	+20	+25	1900
1800	K	136D188X0008K2	0.50	14	7	25	-90	+25	+30	2300
10 V _{DC} AT +85 °C; 7 V _{DC} AT +125 °C										
120	C	136D127X0010C2	1.60	54	2	6	-40	+14	+16	900
150	C	136D157X0010C2	1.50	54	2	9	-55	+13	+16	900
390	F	136D397X0010F2	1.25	27	3	9	-66	+16	+20	1450
560	F	136D567X0010F2	1.25	27	3	16	-77	+16	+20	1450
1200	T	136D128X0010T2	0.75	18	5	20	-88	+20	+25	1850
1500	K	136D158X0010K2	0.50	15	7	25	-88	+25	+30	2300
15 V _{DC} AT +85 °C; 10 V _{DC} AT +125 °C										
82	C	136D826X0015C2	0.95	72	2	6	-35	+12	+16	900
100	C	136D107X0015C2	0.95	72	2	9	-44	+13	+16	900
270	F	136D277X0015F2	1.25	31	3	9	-62	+16	+15	1450
390	F	136D397X0015F2	1.25	31	3	16	-66	+16	+20	1450
680	T	136D687X0015T2	0.90	22	6	18	-74	+20	+25	1800
820	T	136D827X0015T2	0.90	22	6	24	-77	+20	+25	1800
1000	K	136D108X0015K2	0.60	17	8	32	-77	+25	+30	2330
25 V _{DC} AT +85 °C; 15 V _{DC} AT +125 °C										
47	C	136D476X0025C2	2.60	100	2	6	-23	+12	+15	800
56	C	136D566X0025C2	2.15	90	2	6	-25	+12	+15	850
68	C	136D686X0025C2	2.15	90	2	9	-40	+12	+15	850
180	F	136D187X0025F2	1.35	33	3	9	-54	+13	+15	1400
270	F	136D277X0025F2	1.35	33	3	16	-62	+13	+16	1400
470	T	136D477X0025T2	0.90	24	6	18	-65	+18	+25	1750
560	T	136D567X0025T2	0.90	24	7	28	-72	+20	+25	1750
680	K	136D687X0025K2	0.60	19	8	32	-72	+25	+30	2100
30 V _{DC} AT +85 °C; 20 V _{DC} AT +125 °C										
47	C	136D476X0030C2	2.60	100	2	6	-23	+12	+15	800
56	C	136D566X0030C2	2.60	100	2	9	-38	+12	+15	800
150	F	136D157X0030F2	1.25	36	3	9	-42	+13	+15	1200
220	F	136D227X0030F2	1.25	36	3	16	-60	+13	+16	1200
390	T	136D397X0030T2	0.90	25	6	18	-55	+18	+25	1500
470	T	136D477X0030T2	0.90	25	8	32	-65	+20	+25	1500
560	K	136D567X0030K2	0.65	20	9	36	-65	+25	+30	2000

Note

- ⁽¹⁾ Part numbers listed are for units with $\pm 20\%$ capacitance tolerance insulated capacitors. For $\pm 10\%$ tolerance capacitors, change the digit following the letter "X" from "0" to "9"; for $\pm 5\%$, change the digit following the letter "X" from "0" to "5". For capacitors without outer polyester-film insulation, change the last digit in the part number from "2" to "0". For capacitors with a high temperature insulating sleeve, change the last digit in the part number from "2" to "3". For RoHS compliant add "E3".



EXTENDED RATINGS

CAPACITANCE (μ F)	CASE CODE	PART NUMBER ⁽¹⁾	MAX. ESR	MAX. IMP.	MAX. DCL (μ A)		MAX. CAPACITANCE CHANGE (%) AT			MAX. RIPPLE 40 kHz I_{RMS} (mA)
			AT +25 °C 120 Hz (Ω)	AT -55 °C 120 Hz (Ω)	AT		-55 °C	+85 °C	+125 °C	
					+25 °C	+85 °C +125 °C				
35 V _{DC} AT +85 °C; 22 V _{DC} AT +125 °C										
39	C	136D396X0035C2	2.05	61	2	6	-22	+12	+14	820
120	F	136D127X0035F2	1.25	31	3	10	-40	+13	+15	1315
330	T	136D337X0035T2	0.90	20	6	18	-50	+16	+25	1640
370	K	136D377X0035K2	0.65	15	9	36	-60	+25	+30	2040
40 V _{DC} AT +85 °C; 25 V _{DC} AT +125 °C										
39	C	136D396X0040C2	2.05	61	2	6	-22	+12	+14	820
50 V _{DC} AT +85 °C; 30 V _{DC} AT +125 °C										
33	C	136D336X0050C2	2.50	135	2	9	-29	+10	+12	700
100	F	136D107X0050F2	1.40	49	4	12	-36	+13	+15	1200
120	F	136D127X0050F2	1.25	49	4	24	-42	+12	+15	1200
270	T	136D277X0050T2	1.00	30	8	32	-46	+20	+25	1450
330	K	136D337X0050K2	0.75	30	9	36	-46	+25	+30	1900
60 V _{DC} AT +85 °C; 40 V _{DC} AT +125 °C										
18	C	136D186X0060C2	3.50	160	2	12	-20	+7	+8	700
27	C	136D276X0060C2	2.51	144	3	12	-24	+10	+12	700
82	F	136D826X0060F2	1.45	54	4	16	-30	+15	+15	1100
100	F	136D107X0060F2	1.25	54	4	20	-36	+12	+15	1100
220	T	136D227X0060T2	0.90	29	8	32	-40	+16	+20	1400
270	K	136D277X0060K2	0.70	23	9	36	-45	+20	+25	1850
330	K	136D337X0060K2	0.65	31	10	40	-72	+25	+25	1850
63 V _{DC} AT +85 °C; 40 V _{DC} AT +125 °C										
100	F	136D107X0063F2	1.25	54	2	12	-36	+12	+15	1100
75 V _{DC} AT +85 °C; 50 V _{DC} AT +125 °C										
12	C	136D126X0075C2	2.55	157	3	12	-19	+10	+12	600
22	C	136D226X0075C2	2.57	157	3	12	-19	+10	+12	600
68	F	136D686X0075F2	1.50	63	4	16	-25	+12	+15	1000
82	F	136D826X0075F2	1.23	63	4	24	-30	+12	+15	1000
180	T	136D187X0075T2	0.90	30	9	36	-35	+16	+20	1300
220	K	136D227X0075K2	1.12	24	10	40	-40	+20	+25	1800
300	K	136D307X0075K2	0.90	32	12	48	-60	+22	+22	2000
100 V _{DC} AT +85 °C; 65 V _{DC} AT +125 °C										
10	C	136D106X0100C2	2.99	200	3	12	-17	+10	+12	800
39	F	136D396X0100F2	1.77	80	5	24	-20	+12	+15	1300
56	T	136D566X0100T2	1.22	50	5	20	-25	+12	+12	1400
68	T	136D686X0100T2	1.11	40	10	40	-30	+14	+16	1600
120	K	136D127X0100K2	1.38	30	12	48	-35	+15	+17	2000
125 V _{DC} AT +85 °C; 85 V _{DC} AT +125 °C										
6.8	C	136D685X0125C2	5.86	300	3	12	-14	+10	+12	700
27	F	136D276X0125F2	1.77	90	5	24	-18	+12	+15	1200
47	T	136D476X0125T2	1.12	50	10	40	-26	+14	+16	1500
56	T	136D566X0125T2	1.11	50	10	40	-26	+14	+16	1500
68	K	136D686X0125K2	1.10	32	11	44	-28	+15	+16	1850
82	K	136D826X0125K2	1.41	32	12	48	-30	+15	+17	1900

Note

⁽¹⁾ Part numbers listed are for units with $\pm 20\%$ capacitance tolerance insulated capacitors. For $\pm 10\%$ tolerance capacitors, change the digit following the letter "X" from "0" to "9"; for $\pm 5\%$, change the digit following the letter "X" from "0" to "5". For capacitors without outer polyester-film insulation, change the last digit in the part number from "2" to "0". For capacitors with a high temperature insulating sleeve, change the last digit in the part number from "2" to "3". For RoHS compliant add "E3".



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.