

Aluminum Capacitors + 105 °C, General Purpose Miniature, Radial Lead

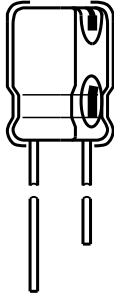


Fig.1 Component outline

FEATURES

- High CV per case size
- Low cost
- Solvent resistant construction
(through 100 WV_{DC})
- High temperature operation
- Life test to 2000 h at + 105 °C
- Compliant to RoHS Directive 2002/95/EC


**RoHS
COMPLIANT**

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case size Ø D x L in mm	0.197" x 0.433" [5.0 x 11.0] to 0.709" x 1.575" [18.0 x 40.0]
Operating temperature	- 55 °C to + 105 °C (6.3 WV _{DC} to 100 WV _{DC}) - 40 °C to + 105 °C (160 WV _{DC} to 250 WV _{DC})
Rated Capacitance range, C _R	0.47 µF to 15 000 µF
Tolerance on C _R	± 20 %
Rated voltage range, U _R	6.3 WV _{DC} to 250 WV _{DC}
Termination	2 radial leads
Life validation test at 105 °C	2000 h: Δ CAP ± 20 % from initial measurement. Δ DF 2 x initial specified limit. Δ DCL ≤ initial specified limit.
Shelf life at 105 °C	1000 h: Δ CAP ± 20 % from initial measurement. Δ DF 2 x initial specified limit. Δ DCL ≤ initial specified limit
DC leakage current	Rated voltage for 1 min for 6.3 WV _{DC} to 100 WV _{DC} units: I < 0.03 CV or 4 µA (whichever is greater). Rated voltage for 2 min for 6.3 WV _{DC} to 100 WV _{DC} units: I < 0.04 CV or 3 µA (whichever is greater). rated voltage for 1 min for 160 WV _{DC} to 250 WV _{DC} units: I < 0.1 CV + 40 µA and CV > 1000; I < 0.04 CV + 100 µA and CV > 1000

RIPPLE CURRENT MULTIPLIERS						
TEMPERATURE						
Ambient Temperature			Multipliers			
+ 70 °C			1.78			
+ 85 °C			1.4			
+ 105 °C			1.0			
FREQUENCY (Hz)						
WV _{DC}	Cap. (µF)	50 to 60	100 to 120	300 to 400	1 kHz	≤ 10 kHz
6.3 to 100	0 to 47	0.75	1	1.35	1.57	2.00
	100 to 470	0.80	1	1.23	1.34	1.50
160 to 250	1000 to 22 000 000	0.85	1	1.10	1.13	1.15
	0.47 to 100	0.80	1	1.25	1.40	1.60

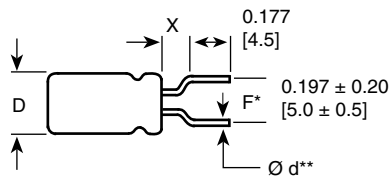
LOW TEMPERATURE PERFORMANCE		
MAXIMUM IMPEDANCE RATIO Z ^(T) /Z ^(+20 °C)		
MAXIMUM AT 120 Hz		
Rated Voltage (WV _{DC})	Z - 25 °C/Z + 20 °C	Z - 40 °C/Z + 20 °C
6.3	4.0	8.0
10.0	3.0	6.0
16.0	2.0	4.0
25.0 to 100.0	2.0	3.0
160.0 to 200.0	2.0	4.0
250.0	4.0	6.0

DIMENSIONS in inches [millimeters]				
CASE CODE	NOMINAL CASE SIZE D x L	LEAD SPACING S	NOMINAL LEAD DIAMETER D	TYPICAL WEIGHT (g)
JA	0.197 x .433 [5.0 x 11.0]	0.079 [2.0]	0.020 [0.50]	0.44
AA	0.248 x .433 [6.3 x 11.0]	0.098 [2.5]	0.020 [0.50]	0.63
BB	0.315 x .453 [8.0 x 11.5]	0.138 [3.5]	0.024 [0.60]	1.03
CC	0.394 x .492 [10.0 x 12.5]	0.197 [5.0]	0.024 [0.60]	1.53
CD	0.394 x .630 [10.0 x 16.0]	0.197 [5.0]	0.024 [0.60]	1.86
CG	0.394 x .787 [10.0 x 20.0]	0.197 [5.0]	0.024 [0.60]	2.48
DG	0.492 x 0.787 [12.5 x 20.0]	0.197 [5.0]	0.024 [0.60]	3.98

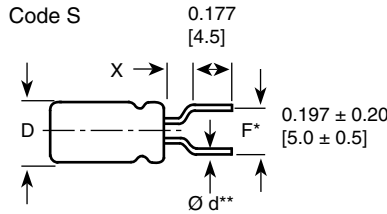
DIMENSIONS in inches [millimeters]				
CASE CODE	NOMINAL CASE SIZE D x L	LEAD SPACING S	NOMINAL LEAD DIAMETER D	TYPICAL WEIGHT (g)
DK	0.492 x 0.984 [12.5 x 25.0]	0.197 [5.0]	0.024 [0.60]	5.27
EK	0.630 x 0.984 [16.0 x 25.0]	0.295 [7.5]	0.031 [0.80]	7.72
EN	0.630 x 1.24 [16.0 x 31.5]	0.295 [7.5]	0.031 [0.80]	9.90
ER	0.630 x 1.40 [16.0 x 35.5]	0.295 [7.5]	0.031 [0.80]	11.10
FR	0.709 x 1.40 [18.0 x 35.5]	0.295 [7.5]	0.031 [0.80]	13.04
FV	0.709 x 1.575 [18.0 x 40.0]	0.295 [7.5]	0.031 [0.80]	15.74

ELECTROLYTIC CAPACITOR WITH CUT OR FORMED LEADS in inches [millimeters]

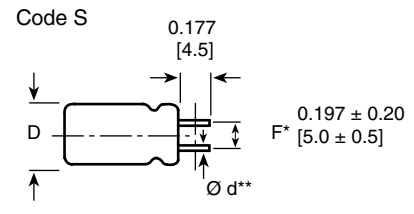
Code F



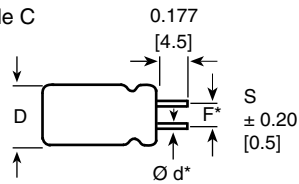
Code S



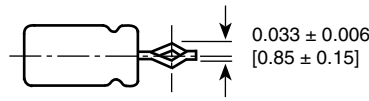
Code S



Code C

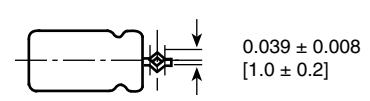


Code S



(4, 5, 6.3, 8)

Code S



(10, 12.5, 16, 18)

DIMENSIONS in inches [millimeters]						
FORMING METHOD	FORMED LEAD CODE	DIMENSIONS				
		D	L.S.	P	e***	X (Max.)
Formed and Cut	F	0.197 [5.0]	0.197 [5.0]	0.079 [2.0]	-	0.059 [1.5]
		0.248 [6.3]	0.197 [5.0]	0.098 [2.5]	-	0.098 [2.5]
		0.315 [8.0]	0.197 [5.0]	0.138 [3.5]	-	0.098 [2.5]
Cut	C	0.394 [10.0]	0.197 [5.0]	-	-	-
		0.492 [12.5]	0.197 [5.0]	-	-	-
		0.630 [16.0]	0.295 [7.5]	-	-	-
		0.709 [18.0]	0.295 [7.5]	-	-	-
Snap-in	S	0.197 [5.0]	0.197 [5.0]	0.079 [2.0]	0.043 [1.1]	0.059 [1.5]
		0.248 [6.3]	0.197 [5.0]	0.098 [2.5]	0.043 [1.1]	0.059 [1.5]
		0.315 [8.0]	0.197 [5.0]	0.138 [3.5]	0.051 [1.3]	0.059 [1.5]
		0.394 [10.0]	0.197 [5.0]	-	0.051 [1.3]	-
		0.492 [12.5]	0.197 [5.0]	-	0.051 [1.3]	-
		0.630 [16.0]	0.295 [7.5]	-	0.051 [1.3]	-
		0.709 [18.0]	0.295 [7.5]	-	0.051 [1.3]	-

Note The ammo pack code is to be added at the end of type number in the 14th and 15th position as 8P. To specify formed, cut or snap-in leads and for tape and ammo, both positions 14 and 15 of the type number must be filled in with the proper codes.

** Except 0.394 [10.0 mm] and 0.492 [12.5 mm] diameter have straight unformed leads.

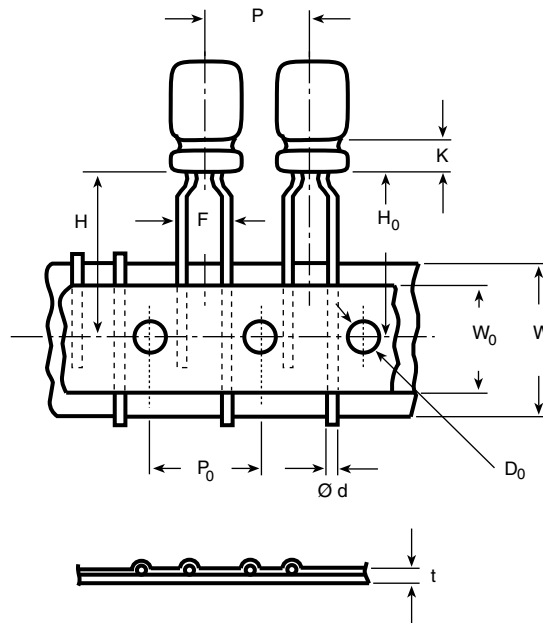
TAPED CAPACITORS FOR AUTOMATIC INSERTION SYSTEMS in inches [millimeters]					
PACKAGING	LEAD CODE 14th AND 15th DIGITS OF PN	SPECIFICATION		LEAD SPACE	CAPACITOR SIZES AVAILABLE
		LEAD STYLE	+ LEADER		
Ammo Pack	8P	Formed Lead ⁽¹⁾	-	0.197 [5.0]	0.197 x 0.433 [5.0 x 11.0] - 0.492 x 0.787 [4.0 x 7.0 - 12.5 x 20.0] Case codes JA, AA, BB, CC, CD, DG

Note The ammo pack code is to be added at the end of type number in the 14th and 15th position as 8P. To specify formed, cut or snap-in leads and for tape and ammo, both positions 14 and 15 of the type number must be filled in with the proper codes.

⁽¹⁾ Except 0.394 [10.0 mm] and 0.492 [12.5 mm] diameter have straight unformed leads.

TAPING SPECIFICATIONS in inches [millimeters]

Formed Lead Type



DIMENSIONS in inches [millimeters]					
ITEM	CASE SIZE (Diameter x Length)				
	FORMED LEAD TYPE			STRAIGHT LEAD TYPE	
	0.197 x 0.433 [5.0 x 11.0]	0.248 x 0.433 [6.3 x 11.0]	0.315 x 0.452 [8.0 x 11.5]	0.394 [10.0] (Dia.)	0.492 [12.5] (Dia.)
Ø d - Lead-wire diameter	0.020 [0.5]	0.020 [0.5]	0.024 [0.6]	0.024 [0.6]	0.024 [0.6]
P - Pitch of component	0.500 [12.7]	0.500 [12.7]	0.500 [12.7]	0.500 [12.7]	0.591 [15.0]
P ₀ - Feed hole pitch	0.500 [12.7]	0.500 [12.7]	0.500 [12.7]	0.500 [12.7]	0.591 [15.0]
F - Lead-to-lead distance	0.197 [5.0]	0.197 [5.0]	0.197 [5.0]	0.197 [5.0]	0.197 [5.0]
K - Clinch height	0.098 [2.5]	0.098 [2.5]	0.157 [4.0]	-	-
H - Height of component from tape center	0.728 [18.5]	0.728 [18.5]	0.787 [20.0]	0.728 [18.5]	0.630 [16.0]
H ₀ - Lead-wire clinch height	0.630 [16.0]	0.630 [16.0]	0.630 [16.0]	-	-
W - Tape width	0.709 [18.0]	0.709 [18.0]	0.709 [18.0]	0.709 [18.0]	0.709 [18.0]
W ₀ - Hold down tape width	0.512 [13.0]	0.512 [13.0]	0.512 [13.0]	0.512 [13.0]	0.512 [13.0]
D ₀ - Feed hole diameter	0.157 [4.0]	0.157 [4.0]	0.157 [4.0]	0.157 [4.0]	0.157 [4.0]
t - Total tape thickness	0.028 [0.7]	0.028 [0.7]	0.028 [0.7]	0.028 [0.7]	0.028 [0.7]

Note Coding of cut or formed lead to be added to the end of type number in 15th position (with position 14 coded "6").

* Formed lead. ** Lead thickness Ø d depends on capacitor specification. *** Lead protrusion at bottom of tape.

ORDERING EXAMPLE

Electrolytic capacitor 517D series: 517D 107M 6R3 JA 6 A E3

DESCRIPTION	
CODE	EXPLANATION
517D	Product type
107	Capacitance value (100 μ F)
M	Tolerance (M = \pm 20 %)
6R3	Voltage rating at 85 °C (6R3 = 6.3 V)
JA	Can size (see dimensions table)
6	Packaging (bulk)
A	Lead style (uncut)
E3	RoHS compliant indicator

PACKING AND LEAD STYLES:

6A	Bulk; uncut leads
6C	Bulk; cut leads
6F	Bulk; formed and cut leads
6S	Bulk; snap-in leads
8P	Ammopack, (cases codes JA, AA, BB, CC, CD, CG, DG only)

ELECTRICAL DATA AND ORDERING INFORMATION				
CAPACITANCE (μ F)	PART NUMBER	NOMINAL CASE SIZE D x L	Max. RIPPLE at + 105 °C 120 Hz (mA)	Max. DF at + 20 °C 120 Hz
6.3 WV_{DC} at + 105 °C, SURGE = 8 V				
22.0	517D226M6R3JA6AE3	0.197 x 0.433 [5.0 x 11.0]	34.0	0.26
33.0	517D336M6R3JA6AE3	0.197 x 0.433 [5.0 x 11.0]	50.0	0.26
47.0	517D476M6R3JA6AE3	0.197 x 0.433 [5.0 x 11.0]	65.0	0.26
100.0	517D107M6R3JA6AE3	0.197 x 0.433 [5.0 x 11.0]	100.0	0.26
220.0	517D227M6R3AA6AE3	0.248 x 0.433 [6.3 x 11.0]	165.0	0.26
330.0	517D337M6R3AA6AE3	0.248 x 0.433 [6.3 x 11.0]	200.0	0.26
470.0	517D477M6R3BB6AE3	0.315 x 0.453 [8.0 x 11.5]	280.0	0.26
1000.0	517D108M6R3CC6AE3	0.394 x 0.492 [10.0 x 12.5]	470.0	0.26
2200.0	517D228M6R3DG6AE3	0.492 x 0.787 [12.5 x 20.0]	930.0	0.26
3300.0	517D338M6R3DG6AE3	0.492 x 0.787 [12.5 x 20.0]	1100.0	0.26
4700.0	517D478M6R3EK6AE3	0.630 x 0.984 [16.0 x 25.0]	1320.0	0.26
6800.0	517D688M6R3EK6AE3	0.630 x 0.984 [16.0 x 25.0]	1490.0	0.26
10 000.0	517D109M6R3EN6AE3	0.630 x 1.240 [16.0 x 31.5]	1830.0	0.26
15 000.0	517D159M6R3FR6AE3	0.709 x 1.398 [18.0 x 35.5]	2280.0	0.26
10 WV_{DC} at + 105 °C, SURGE = 13 V				
22.0	517D226M010JA6AE3	0.197 x 0.433 [5.0 x 11.0]	45.0	0.22
33.0	517D336M010JA6AE3	0.197 x 0.433 [5.0 x 11.0]	60.0	0.22
47.0	517D476M010JA6AE3	0.197 x 0.433 [5.0 x 11.0]	75.0	0.22
100.0	517D107M010JA6AE3	0.197 x 0.433 [5.0 x 11.0]	110.0	0.22
220.0	517D227M010AA6AE3	0.248 x 0.433 [6.3 x 11.0]	180.0	0.22
330.0	517D337M010BB6AE3	0.315 x 0.453 [8.0 x 11.5]	255.0	0.22
470.0	517D477M010BB6AE3	0.315 x 0.453 [8.0 x 11.5]	305.0	0.22
1000.0	517D108M010CD6AE3	0.394 x 0.630 [10.0 x 16.0]	570.0	0.22
2200.0	517D228M010DG6AE3	0.492 x 0.787 [12.5 x 20.0]	1010.0	0.22
3300.0	517D338M010DK6AE3	0.492 x 0.984 [12.5 x 25.0]	1220.0	0.22
4700.0	517D478M010EK6AE3	0.630 x 0.984 [16.0 x 25.0]	1410.0	0.22
6800.0	517D688M010EN6AE3	0.630 x 1.240 [16.0 x 31.5]	1610.0	0.22
10 000.0	517D109M010FR6AE3	0.709 x 1.398 [18.0 x 35.5]	1980.0	0.22
15 000.0	517D159M010FV6AE3	0.709 x 1.575 [18.0 x 40.0]	2470.0	0.22



Aluminum Capacitors
+ 105 °C, General Purpose Miniature, Radial Lead

Vishay Sprague

ELECTRICAL DATA AND ORDERING INFORMATION				
CAPACITANCE (µF)	PART NUMBER	NOMINAL CASE SIZE D x L	Max. RIPPLE at + 105 °C 120 Hz (mA)	Max. DF at + 20 °C 120 Hz
16 WV_{DC} at + 105 °C, SURGE = 20 V				
10.0	517D106M016JA6AE3	0.197 x 0.433 [5.0 x 11.0]	35.0	0.18
22.0	517D226M016JA6AE3	0.197 x 0.433 [5.0 x 11.0]	55.0	0.18
33.0	517D336M016JA6AE3	0.197 x 0.433 [5.0 x 11.0]	70.0	0.18
47.0	517D476M016JA6AE3	0.197 x 0.433 [5.0 x 11.0]	85.0	0.18
100.0	517D107M016AA6AE3	0.248 x 0.433 [6.3 x 11.0]	135.0	0.18
220.0	517D227M016BB6AE3	0.315 x 0.453 [8.0 x 11.5]	235.0	0.18
330.0	517D337M016BB6AE3	0.315 x 0.453 [8.0 x 11.5]	285.0	0.18
470.0	517D477M016CC6AE3	0.394 x 0.492 [10.0 x 12.5]	395.0	0.18
1000.0	517D108M016CG6AE3	0.394 x 0.787 [10.0 x 20.0]	700.0	0.18
2200.0	517D228M016DK6AE3	0.492 x 0.984 [12.5 x 25.0]	1150.0	0.18
3300.0	517D338M016EK6AE3	0.630 x 0.984 [16.0 x 25.0]	1350.0	0.18
4700.0	517D478M016EN6AE3	0.630 x 1.240 [16.0 x 31.5]	1560.0	0.18
6800.0	517D688M016FR6AE3	0.709 x 1.398 [18.0 x 35.5]	1750.0	0.18
10 000.0	517D109M016FV6AE3	0.709 x 1.575 [18.0 x 40.0]	2170.0	0.18
25 WV_{DC} at + 105 °C, SURGE = 32 V				
4.7	517D475M025JA6AE3	0.197 x 0.433 [5.0 x 11.0]	24.0	0.16
10.0	517D106M025JA6AE3	0.197 x 0.433 [5.0 x 11.0]	39.0	0.16
22.0	517D226M025JA6AE3	0.197 x 0.433 [5.0 x 11.0]	60.0	0.16
33.0	517D336M025JA6AE3	0.197 x 0.433 [5.0 x 11.0]	75.0	0.16
47.0	517D476M025JA6AE3	0.197 x 0.433 [5.0 x 11.0]	90.0	0.16
100.0	517D107M025AA6AE3	0.248 x 0.433 [6.3 x 11.0]	145.0	0.16
220.0	517D227M025BB6AE3	0.315 x 0.453 [8.0 x 11.5]	250.0	0.16
330.0	517D337M025CC6AE3	0.394 x 0.492 [10.0 x 12.5]	355.0	0.16
470.0	517D477M025CD6AE3	0.394 x 0.630 [10.0 x 16.0]	470.0	0.16
1000.0	517D108M025DG6AE3	0.492 x 0.787 [12.5 x 20.0]	855.0	0.16
2200.0	517D228M025EK6AE3	0.630 x 0.984 [16.0 x 25.0]	1230.0	0.16
3300.0	517D338M025EN6AE3	0.630 x 1.240 [16.0 x 31.5]	1450.0	0.16
4700.0	517D478M025FR6AE3	0.709 x 1.398 [18.0 x 35.5]	1660.0	0.16
35 WV_{DC} at + 105 °C, SURGE = 44 V				
4.7	517D475M035JA6AE3	0.197 x 0.433 [5.0 x 11.0]	27.0	0.13
10.0	517D106M035JA6AE3	0.197 x 0.433 [5.0 x 11.0]	44.0	0.13
22.0	517D226M035JA6AE3	0.197 x 0.433 [5.0 x 11.0]	65.0	0.13
33.0	517D336M035JA6AE3	0.197 x 0.433 [5.0 x 11.0]	85.0	0.13
47.0	517D476M035AA6AE3	0.248 x 0.433 [6.3 x 11.0]	115.0	0.13
100.0	517D107M035BB6AE3	0.315 x 0.453 [8.0 x 11.5]	190.0	0.13
220.0	517D227M035CC6AE3	0.394 x 0.492 [10.0 x 12.5]	325.0	0.13
330.0	517D337M035CD6AE3	0.394 x 0.630 [10.0 x 16.0]	440.0	0.13
470.0	517D477M035CG6AE3	0.394 x 0.787 [10.0 x 20.0]	580.0	0.13
1000.0	517D108M035DK6AE3	0.492 x 0.984 [12.5 x 25.0]	995.0	0.13
2200.0	517D228M035EN6AE3	0.630 x 1.240 [16.0 x 31.5]	1450.0	0.13
3300.0	517D338M035FR6AE3	0.709 x 1.398 [18.0 x 35.5]	1660.0	0.13
4700.0	517D478M035FV6AE3	0.709 x 1.575 [18.0 x 40.0]	2030.0	0.13

ELECTRICAL DATA AND ORDERING INFORMATION

CAPACITANCE (μ F)	PART NUMBER	NOMINAL CASE SIZE D x L	Max. RIPPLE at + 105 °C 120 Hz (mA)	Max. DF at + 20 °C 120 Hz
50 WV_{DC} at + 105 °C, SURGE = 63 V				
0.47	517D474M050JA6AE3	0.197 x 0.433 [5.0 x 11.0]	7.0	0.10
1.0	517D105M050JA6AE3	0.197 x 0.433 [5.0 x 11.0]	12.0	0.10
2.2	517D225M050JA6AE3	0.197 x 0.433 [5.0 x 11.0]	18.0	0.10
3.3	517D335M050JA6AE3	0.197 x 0.433 [5.0 x 11.0]	25.0	0.10
4.7	517D475M050JA6AE3	0.197 x 0.433 [5.0 x 11.0]	30.0	0.10
10.0	517D106M050JA6AE3	0.197 x 0.433 [5.0 x 11.0]	50.0	0.10
22.0	517D226M050JA6AE3	0.197 x 0.433 [5.0 x 11.0]	75.0	0.10
33.0	517D336M050M6AE3	0.248 x 0.433 [6.3 x 11.0]	105.0	0.10
47.0	517D476M050AA6AE3	0.248 x 0.433 [6.3 x 11.0]	125.0	0.10
100.0	517D107M050BB6AE3	0.315 x 0.453 [8.0 x 11.5]	210.0	0.10
220.0	517D227M050CD6AE3	0.394 x 0.630 [10.0 x 16.0]	400.0	0.10
330.0	517D337M050CG6AE3	0.394 x 0.787 [10.0 x 20.0]	535.0	0.10
470.0	517D477M050DG6AE3	0.492 x 0.787 [12.5 x 20.0]	730.0	0.10
1000.0	517D108M050EK6AE3	0.630 x 0.984 [16.0 x 25.0]	1110.0	0.10
2200.0	517D228M050FR6AE3	0.709 x 1.398 [18.0 x 35.5]	1530.0	0.10
63 WV_{DC} at + 105 °C, SURGE = 79 V				
4.7	517D475M063JA6AE3	0.197 x 0.433 [5.0 x 11.0]	34.0	0.09
10.0	517D106M063JA6AE3	0.197 x 0.433 [5.0 x 11.0]	55.0	0.09
22.0	517D226M063AA6AE3	0.248 x 0.433 [6.3 x 11.0]	90.0	0.09
33.0	517D336M063AA6AE3	0.248 x 0.433 [6.3 x 11.0]	110.0	0.09
47.0	517D476M063BB6AE3	0.315 x 0.453 [8.0 x 11.5]	155.0	0.09
100.0	517D107M063CC6AE3	0.394 x .0492 [10.0 x 12.5]	260.0	0.09
220.0	517D227M063CG6AE3	0.394 x 0.787 [10.0 x 20.0]	465.0	0.09
330.0	517D337M063DG6AE3	0.492 x 0.787 [12.5 x 20.0]	650.0	0.09
4700.0	517D477M063DK6AE3	0.492 x 0.984 [12.5 x 25.0]	800.0	0.09
1000.0	517D108M063EN6AE3	0.630 x 1.240 [16.0 x 31.5]	1200.0	0.09
2200.0	517D228M063FV6AE3	0.709 x 1.575 [18.0 x 40.0]	1840.0	0.09
100 WV_{DC} at + 105 °C, SURGE = 125 V				
0.47	517D474M100JA6AE3	0.197 x 0.433 [5.0 x 11.0]	10.0	0.08
1.0	517D105M100JA6AE3	0.197 x 0.433 [5.0 x 11.0]	15.0	0.08
2.2	517D225M100JA6AE3	0.197 x 0.433 [5.0 x 11.0]	22.0	0.08
3.3	517D335M100JA6AE3	0.197 x 0.433 [5.0 x 11.0]	29.0	0.08
4.7	517D475M100JA6AE3	0.197 x 0.433 [5.0 x 11.0]	37.0	0.08
10.0	517D106M100AA6AE3	0.248 x 0.433 [6.3 x 11.0]	65.0	0.08
22.0	517D226M100BB6AE3	0.315 x 0.453 [8.0 x 11.5]	115.0	0.08
33.0	517D336M100CC6AE3	0.394 x 0.492 [10.0 x 12.5]	160.0	0.08
47.0	517D476M100CD6AE3	0.394 x 0.630 [10.0 x 16.0]	220.0	0.08
100.0	517D107M100DG6AE3	0.492 x 0.787 [12.5 x 20.0]	385.0	0.08
220.0	517D227M100EK6AE3	0.630 x 0.984 [16.0 x 25.0]	590.0	0.08
330.0	517D337M100EK6AE3	0.630 x 0.984 [16.0 x 25.0]	720.0	0.08
470.0	517D477M100EN6AE3	0.630 x 1.240 [16.0 x 31.5]	875.0	0.08
1000.0	517D108M100FV6AE3	0.709 x 1.575 [18.0 x 40.0]	1320.0	0.08



Aluminum Capacitors
+ 105 °C, General Purpose Miniature, Radial Lead

Vishay Sprague

ELECTRICAL DATA AND ORDERING INFORMATION				
CAPACITANCE (μF)	PART NUMBER	NOMINAL CASE SIZE D x L	Max. RIPPLE at + 105 °C 120 Hz (mA)	Max. DF at + 20 °C 120 Hz
160 WV_{DC} at + 105 °C, SURGE = 200 V				
0.47	517D474M160AA6AE3	0.248 x 0.433 [6.3 x 11.0]	12.0	0.15
1.0	517D105M160AA6AE3	0.248 x 0.433 [6.3 x 11.0]	17.0	0.15
2.2	517D225M160AA6AE3	0.248 x 0.433 [6.3 x 11.0]	25.0	0.15
3.3	517D335M160BB6AE3	0.315 x 0.453 [8.0 x 11.5]	36.0	0.15
4.7	517D475M160BB6AE3	0.315 x 0.453 [8.0 x 11.5]	43.0	0.15
10.0	517D106M160CC6AE3	0.394 x 0.492 [10.0 x 12.5]	70.0	0.15
22.0	517D226M160CG6AE3	0.394 x 0.787 [10.0 x 20.0]	130.0	0.15
33.0	517D336M160DG6AE3	0.492 x 0.787 [12.5 x 20.0]	180.0	0.15
47.0	517D476M160DK6AE3	0.492 x 0.984 [12.5 x 25.0]	220.0	0.15
100.0	517D107M160EK6AE3	0.630 x 0.984 [16.0 x 25.0]	330.0	0.15
220.0	517D227M160FR6AE3	0.709 x 1.398 [18.0 x 35.5]	500.0	0.15
200 WV_{DC} at + 105 °C, SURGE = 250 V				
0.47	517D474M200AA6AE3	0.248 x 0.433 [6.3 x 11.0]	12.0	0.15
1.0	517D105M200AA6AE3	0.248 x 0.433 [6.3 x 11.0]	17.0	0.15
2.2	517D225M200AA6AE3	0.248 x 0.433 [6.3 x 11.0]	25.0	0.15
3.3	517D335M200BB6AE3	0.315 x 0.453 [8.0 x 11.5]	36.0	0.15
4.7	517D475M200CC6AE3	0.394 x 0.492 [10.0 x 12.5]	50.0	0.15
10.0	517D106M200CD6AE3	0.394 x 0.630 [10.0 x 16.0]	80.0	0.15
22.0	517D226M200CG6AE3	0.394 x 0.787 [10.0 x 20.0]	140.0	0.15
33.0	517D336M200DK6AE3	0.492 x 0.984 [12.5 x 25.0]	198.0	0.15
47.0	517D476M200DK6AE3	0.492 x 0.984 [12.5 x 25.0]	220.0	0.15
100.0	517D107M200EN6AE3	0.630 x 1.240 [16.0 x 31.5]	335.0	0.15
220.0	517D227M200FV6AE3	0.709 x 1.575 [18.0 x 40.0]	515.0	0.15
250 WV_{DC} at + 105 °C, SURGE = 300 V				
0.47	517D474M250AA6AE3	0.248 x 0.433 [6.3 x 11.0]	12.0	0.15
1.0	517D105M250AA6AE3	0.248 x 0.433 [6.3 x 11.0]	17.0	0.15
2.2	517D225M250BB6AE3	0.315 x 0.453 [8.0 x 11.5]	29.0	0.15
3.3	517D335M250CC6AE3	0.394 x 0.492 [10.0 x 12.5]	42.0	0.15
4.7	517D475M250CC6AE3	0.394 x 0.492 [10.0 x 12.5]	50.0	0.15
10.0	517D106M250CG6AE3	0.394 x 0.787 [10.0 x 20.0]	88.0	0.15
22.0	517D226M250DK6AE3	0.492 x 0.984 [12.5 x 25.0]	155.0	0.15
33.0	517D336M250DK6AE3	0.492 x 0.984 [12.5 x 25.0]	190.0	0.15
47.0	517D476M250EK6AE3	0.630 x 0.984 [16.0 x 25.0]	230.0	0.15
100.0	517D107M250FR6AE3	0.709 x 1.398 [18.0 x 35.5]	340.0	0.15



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