



## Aluminum Capacitors +85 °C, Miniature, Axial Lead



### FEATURES

- High CV per case size
- Material categorization:  
for definitions of compliance please see  
[www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



RoHS  
COMPLIANT

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case size Ø D x L in mm	0.197" x 0.472" [5.0 x 12.0] to 0.709" x 1.614" [18.0 x 41.0]
Operating temperature	-40 °C to +85 °C (-25 °C to +85 °C for 315 WV <sub>DC</sub> to 450 WV <sub>DC</sub> units)
Rated capacitance range, C <sub>R</sub>	0.47 µF to 10 000 µF
Tolerance on C <sub>R</sub>	± 20 %
Rated voltage range, U <sub>R</sub>	6.3 WV <sub>DC</sub> to 450 WV <sub>DC</sub>
Termination	2 axial leads
Life validation test at 85 °C	2000 h: ΔCAP ≤ 20 % from initial measurement. ΔDF x 2 initial specified limit. ΔDCL ≤ initial specified limit.
Shelf life at 85 °C	1000 h: ΔCAP ± 20 % from initial measurement. ΔDF 2 x initial specified limit. ΔDCL ≤ the initial specified limit.
DC leakage current	Rated voltage for 1 min for 6.3 WV <sub>DC</sub> to 100 WV <sub>DC</sub> units I < 0.03 CV or 4 µA (whichever is greater) Rated voltage for 2 min for 6.3 WV <sub>DC</sub> to 100 WV <sub>DC</sub> units I < 0.01 CV or 3 µA (whichever is greater) Rated voltage for 1 min for 160 WV <sub>DC</sub> to 450 WV <sub>DC</sub> 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			1.27			
+85 °C			1.0			
FREQUENCY (Hz) / CAPACITANCE (µF)						
WV <sub>DC</sub>	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
	1000 to 10 000	0.85	1	1.10	1.13	1.15
160 to 450	1 to 100	0.80	1	1.25	1.40	1.60

LOW TEMPERATURE PERFORMANCE		
MAXIMUM IMPEDANCE RATIO Z <sup>(T)</sup> / Z <sup>(+20 °C)</sup> MAXIMUM AT 120 Hz		
RATED VOLTAGE (WV <sub>DC</sub> )	Z - 25 °C / Z + 20 °C	Z - 40 °C / Z + 20 °C
6.3	4.0	10.0
10.0	3.0	8.0
16.0	2.0	6.0
25.0	2.0	4.0
35.0 to 100.0	2.0	3.0
160.0 to 250.0	4.0	12.0
315.0 to 350.0	6.0	-
400.0 to 450.0	15.0	-

DIMENSIONS in inches [millimeters]							
CASE CODE	NOMINAL CASE SIZE D x L	LEAD DIAMETER	TYPICAL WEIGHT (g)	CASE CODE	NOMINAL CASE SIZE D x L	LEAD DIAMETER	TYPICAL WEIGHT (g)
JL	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.56	NR	0.394 x 1.023 [10.0 x 26.0]	0.024 [0.6]	3.10
LL	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.90	PR	0.512 x 1.023 [13.0 x 26.0]	0.024 [0.6]	4.63
LM	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	1.07	PS	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	5.47
MM	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	1.45	QS	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	8.26
MN	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	1.70	QT	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	10.42
NP	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	2.32	RT	0.709 x 1.614 [18.0 x 41.0]	0.031 [0.8]	12.42



**DIMENSIONS** in inches [millimeters]



DIMENSIONS in inches [millimeters] AND PACKAGING QUANTITIES				
CASE CODE	TAPING CODE	SPECIFICATIONS		
		TAPE WIDTH $W \pm 0.059$ [1.5]	COMPONENT PITCH $P \pm 0.020$ [0.5]	QUANTITY PER REEL
JL	B	2.063 [52.4]	0.394 [10.0]	1600
LL	B	2.063 [52.4]	0.394 [10.0]	1300
LM	B	2.063 [52.4]	0.394 [10.0]	1300
MM	B	2.063 [52.4]	0.394 [10.0]	1000
MN	B	2.500 [63.5]	0.394 [10.0]	1000
NP	B	2.500 [63.5]	0.591 [15.0]	500
NP	C	2.874 [73.0]	0.591 [15.0]	500
NR	B	2.500 [63.5]	0.591 [15.0]	500
NR	C	2.874 [73.0]	0.591 [15.0]	500
PR	B	2.500 [63.5]	0.591 [15.0]	350
PR	C	2.874 [73.0]	0.591 [15.0]	350
PS	B	2.874 [73.0]	0.591 [15.0]	350

**ORDERING EXAMPLE**

Electrolytic capacitor 516D series: 516D 107 M 6R3 JL 6 A E3

DESCRIPTION	
CODE	EXPLANATION
516D	Product type
107	Capacitance value (100 $\mu$ F)
M	Tolerance (M = $\pm 20$ %)
6R3	Voltage rating at 85 °C (6R3 = 6.3 V)
JL	Can size (see Dimensions table)
6	Packaging (bulk)
A	Lead style (uncut)
E3	RoHS compliant indicator

**PACKING AND LEAD STYLES**

- 6A Bulk, uncut leads.
- 7B Tape and reel. For case codes JL, LL, LM, MM, MN, NP, NR, PR and PS only.
- 7C Tape and reel with 2.874" [73.0] mm tape width. For case codes NP, NR and PR only.

\* Suffix E3 denotes lead (Pb)-free / RoHS-compliant products



<b>ELECTRICAL DATA AND ORDERING INFORMATION</b>					
<b>CAPACITANCE (<math>\mu</math>F)</b>	<b>PART NUMBER</b>	<b>NOMINAL CASE SIZE D x L</b>	<b>LEAD DIAMETER</b>	<b>MAX. DF AT +20 °C 120 Hz</b>	<b>MAX. RIPPLE AT +85 °C / 120 Hz (mA<sub>RMS</sub>)</b>
<b>6.3 WV<sub>DC</sub> AT +85 °C, SURGE = 8 V</b>					
100	516D107M6R3JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.24	110
220	516D227M6R3LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.24	200
330	516D337M6R3LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.24	250
470	516D477M6R3MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.24	330
1000	516D108M6R3NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.24	600
2200	516D228M6R3PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.24	1020
3300	516D338M6R3PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.24	1200
4700	516D478M6R3QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.024 [0.6]	0.24	1500
6800	516D688M6R3QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.24	1840
10 000	516D109M6R3QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.24	2260
<b>10 WV<sub>DC</sub> AT +85 °C, SURGE = 13 V</b>					
33	516D336M010JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.2	65
47	516D476M010JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.2	80
100	516D107M010LL6AE3	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.2	130
220	516D227M010LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.2	210
330	516D337M010MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	300
470	516D477M010MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	350
1000	516D108M010NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.2	640
2200	516D228M010PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.2	1090
3300	516D338M010PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.2	1390
4700	516D478M010QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.2	1730
6800	516D688M010QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.2	1930
10 000	516D109M010RT6AE3	0.709 x 1.614 [18.0 x 41.0]	0.031 [0.8]	0.2	2350
<b>16 WV<sub>DC</sub> AT +85 °C, SURGE = 20 V</b>					
22	516D226M016JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.16	60
33	516D336M016JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.16	70
47	516D476M016JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.16	85
100	516D107M016LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.16	160
220	516D227M016MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.16	260
330	516D337M016MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.16	320
470	516D477M016MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.16	430
1000	516D108M016NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.16	770
2200	516D228M016PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.16	1180
3300	516D338M016QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.16	1620
4700	516D478M016QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.16	1840
6800	516D688M016RT6AE3	0.709 x 1.614 [18.0 x 41.0]	0.031 [0.8]	0.16	2310
<b>25 WV<sub>DC</sub> AT +85 °C, SURGE = 32 V</b>					
10	516D106M025JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.14	40
22	516D226M025JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.14	65
33	516D336M025JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.14	80
47	516D476M025LL6AE3	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.14	100
100	516D107M025LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.14	170
220	516D227M025MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.14	280
330	516D337M025MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.14	380
470	516D477M025NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.14	510
1000	516D108M025PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.14	900



<b>ELECTRICAL DATA AND ORDERING INFORMATION</b>					
<b>CAPACITANCE (<math>\mu</math>F)</b>	<b>PART NUMBER</b>	<b>NOMINAL CASE SIZE D x L</b>	<b>LEAD DIAMETER</b>	<b>MAX. DF AT +20 °C 120 Hz</b>	<b>MAX. RIPPLE AT +85 °C / 120 Hz (mA<sub>RMS</sub>)</b>
<b>25 WV<sub>DC</sub> AT +85 °C, SURGE = 32 V</b>					
2200	516D228M025QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.14	1480
3300	516D338M025QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.14	1710
4700	516D478M025RT6AE3	0.709 x 1.614 [18.0 x 41.0]	0.031 [0.8]	0.14	2170
<b>35 WV<sub>DC</sub> AT +85 °C, SURGE = 44 V</b>					
10	516D106M035JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.12	45
22	516D226M035JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.12	70
33	516D336M035LL6AE3	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.12	90
47	516D476M035LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.12	120
100	516D107M035MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.12	210
220	516D227M035MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.12	340
330	516D337M035NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.12	460
470	516D477M035NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.12	610
1000	516D108M035PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.12	1060
2200	516D228M035QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.12	1580
3300	516D338M035QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.12	2050
<b>50 WV<sub>DC</sub> AT +85 °C, SURGE = 63 V</b>					
0.47	516D474M050JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.1	5
1.0	516D105M050JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.1	10
2.2	516D225M050JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.1	23
3.3	516D335M050JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.1	28
4.7	516D475M050JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.1	34
10	516D106M050JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.1	50
22	516D226M050LL6AE3	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.1	85
33	516D336M050LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.1	110
47	516D476M050LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.1	130
100	516D107M050MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.1	220
220	516D227M050NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.1	410
330	516D337M050NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.1	560
470	516D477M050PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.8]	0.1	730
1000	516D108M050QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.1	1260
2200	516D228M050RT6AE3	0.709 x 1.614 [18.0 x 41.0]	0.031 [0.8]	0.1	1920
<b>63 WV<sub>DC</sub> AT +85 °C, SURGE = 79 V</b>					
3.3	516D335M063JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.08	31
4.7	516D475M063JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.08	37
10	516D106M063JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.08	55
22	516D226M063LL6AE3	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.08	90
33	516D336M063LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.08	120
47	516D476M063MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.08	160
100	516D107M063MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.08	260
220	516D227M063NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.08	480
330	516D337M063PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.08	650
470	516D477M063PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.08	840
1000	516D108M063QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.08	1330



<b>ELECTRICAL DATA AND ORDERING INFORMATION</b>					
<b>CAPACITANCE (<math>\mu</math>F)</b>	<b>PART NUMBER</b>	<b>NOMINAL CASE SIZE D x L</b>	<b>LEAD DIAMETER</b>	<b>MAX. DF AT +20 °C 120 Hz</b>	<b>MAX. RIPPLE AT +85 °C / 120 Hz (mArms)</b>
<b>100 WV<sub>DC</sub> AT +85 °C, SURGE = 125 V</b>					
0.47	516D474M100JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.08	10
1.0	516D105M100JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.08	18
2.2	516D225M100JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.08	28
3.3	516D335M100JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.08	34
4.7	516D475M100JL6AE3	0.197 x 0.472 [5.0 x 12.0]	0.024 [0.6]	0.08	40
10	516D106M100LL6AE3	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.08	60
22	516D226M100MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.08	120
33	516D336M100MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.08	150
47	516D476M100MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.08	190
100	516D107M100NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.08	340
220	516D227M100PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.08	560
330	516D337M100PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.08	750
470	516D477M100QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.08	970
<b>160 WV<sub>DC</sub> AT +85 °C, SURGE = 200 V</b>					
1.0	516D105M160LL6AE3	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.2	13
2.2	516D225M160LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.2	23
3.3	516D335M160MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	33
4.7	516D475M160MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	39
10	516D106M160MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.2	60
22	516D226M160NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.2	120
33	516D336M160PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.2	170
47	516D476M160PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.2	230
100	516D107M160QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.2	430
<b>200 WV<sub>DC</sub> AT +85 °C, SURGE = 250 V</b>					
1.0	516D105M200LL6AE3	0.248 x 0.472 [6.3 x 12.0]	0.024 [0.6]	0.2	13
2.2	516D225M200LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.2	23
3.3	516D335M200MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	33
4.7	516D475M200MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	39
10	516D106M200NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.2	70
22	516D226M200PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.2	140
33	516D336M200PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.2	170
47	516D476M200PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.2	230
100	516D107M200QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.2	430
<b>250 WV<sub>DC</sub> AT +85 °C, SURGE = 300 V</b>					
1.0	516D105M250LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.2	14
2.2	516D225M250MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	27
3.3	516D335M250MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	33
4.7	516D475M250MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.2	45
10	516D106M250NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.2	70
22	516D226M250PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.2	140
33	516D336M250PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.2	190
47	516D476M250QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.2	260
100	516D107M250QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.2	430



ELECTRICAL DATA AND ORDERING INFORMATION					
CAPACITANCE ( $\mu$ F)	PART NUMBER	NOMINAL CASE SIZE D x L	LEAD DIAMETER	MAX. DF AT +20 °C 120 Hz	MAX. RIPPLE AT +85 °C / 120 Hz (mA <sub>RMS</sub> )
<b>315 WV<sub>DC</sub> AT +85 °C, SURGE = 365 V</b>					
1.0	516D105M315LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.2	14
2.2	516D225M315MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.2	27
3.3	516D335M315MN6AE3	0.315 x .0787 [8.0 x 20.0]	0.024 [0.6]	0.2	36
4.7	516D475M315MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.2	45
10	516D106M315NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.2	80
22	516D226M315PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.2	150
33	516D336M315QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.2	210
47	516D476M315QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.2	260
<b>350 WV<sub>DC</sub> AT +85 °C, SURGE = 400 V</b>					
1.0	516D105M350LM6AE3	0.248 x 0.630 [6.3 x 16.0]	0.024 [0.6]	0.25	12
2.2	516D225M350MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.25	24
3.3	516D335M350MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.25	32
4.7	516D475M350NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.25	46
10	516D106M350PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.25	85
22	516D226M350PS6AE3	0.512 x 1.240 [13.0 x 31.5]	0.024 [0.6]	0.25	140
33	516D336M350QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.25	190
47	516D476M350QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.25	260
<b>400 WV<sub>DC</sub> AT +85 °C, SURGE = 450 V</b>					
1.0	516D105M400MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.25	14
2.2	516D225M400MN6AE3	0.315 x 0.787 [8.0 x 20.0]	0.024 [0.6]	0.25	28
3.3	516D335M400NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.25	38
4.7	516D475M400NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.25	46
10	516D106M400PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.25	85
22	516D226M400QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.25	150
33	516D336M400QT6AE3	0.630 x 1.633 [16.0 x 41.5]	0.031 [0.8]	0.25	210
47	516D476M400RT6AE3	0.709 x 1.614 [18.0 x 41.0]	0.031 [0.8]	0.25	290
<b>450 WV<sub>DC</sub> AT +85 °C, SURGE = 500 V</b>					
1.0	516D105M450MM6AE3	0.315 x 0.630 [8.0 x 16.0]	0.024 [0.6]	0.25	14
2.2	516D225M450NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.25	31
3.3	516D335M450NP6AE3	0.394 x 0.827 [10.0 x 21.0]	0.024 [0.6]	0.25	38
4.7	516D475M450NR6AE3	0.394 x 1.024 [10.0 x 26.0]	0.024 [0.6]	0.25	50
10	516D106M450PR6AE3	0.512 x 1.024 [13.0 x 26.0]	0.024 [0.6]	0.25	85
22	516D226M450QS6AE3	0.630 x 1.240 [16.0 x 31.5]	0.031 [0.8]	0.25	150
33	516D336M450RT6AE3	0.709 x 1.614 [18.0 x 41.0]	0.031 [0.8]	0.25	230

Statements about product lifetime are based on calculations and internal testing. They should only be interpreted as estimations. Also due to external factors, the lifetime in the field application may deviate from the calculated lifetime. In general, nothing stated herein shall be construed as a guarantee of durability.



## **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.

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.



Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А