

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


**FEATURES**

- High CV per case size
- Low cost
- Low profile ratings
- 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<br>Ø D x L in mm      | 0.157" x 0.276" [4.0 x 7.0]<br>to 0.709" x 1.575" [18.0 x 40.0]  |
| Operating temperature                   | - 40 °C to + 85 °C<br>- 25 °C to + 85 °C for 315 WV <sub>DC</sub><br>to 450 WV <sub>DC</sub> units   |
| Rated capacitance range, C <sub>R</sub> | 0.1 µF to 18 000 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 radial leads   |
| Life validation test at 85 °C           | 2000 h: ΔCAP ± 20 % from initial measurement.<br>ΔDF 2 x initial specified limit.<br>ΔDCL ≤ initial specified limit.   |
| Shelf life at 85 °C                     | 1000 h: ΔCAP ± 20 % from initial measurement.<br>ΔDF 2 x initial specified limit.<br>ΔDCL ≤ initial specified limit.   |
| DC leakage current                      | Rated voltage for 1 and 2 min for 6.3 WV <sub>DC</sub> to 100 WV <sub>DC</sub> units:<br>I < 0.03 CV or 4 µA (whichever is greater).<br>I < 0.04 CV or 3 µA (whichever is greater).<br>Rated voltage for 1 min for 160 WV <sub>DC</sub> to 450 WV <sub>DC</sub> units:<br>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)             |                |             |            |            |       |          |
| 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 18 000 | 0.85        | 1          | 1.10       | 1.13  | 1.15     |
| 160 to 450                 | 0.47 to 220    | 0.80        | 1          | 1.25       | 1.40  | 1.60     |

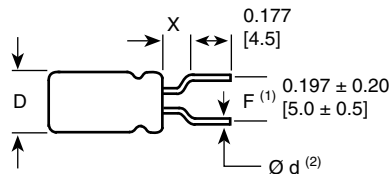
| LOW TEMPERATURE PERFORMANCE                                     |                     |                     |
|---|---------------------|---------------------|
| MAXIMUM IMPEDANCE RATIO Z <sup>(T)</sup> /Z <sup>(+20 °C)</sup> |                     |                     |
| MAXIMUM AT 120 Hz   |                     |                     |
| 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 200.0  | 3.0                 | 4.0                 |
| 250.0   | 3.0                 | 6.0                 |
| 315.0 to 400.0  | 6.0                 | -                   |
| 450.0   | 15.0                | -                   |

| DIMENSIONS in inches [millimeters] |                            |                |                         |                    |
|------------------------------------|----------------------------|----------------|-------------------------|--------------------|
| CASE CODE                          | NOMINAL CASE SIZE D x L    | LEAD SPACING S | NOMINAL LEAD DIAMETER D | TYPICAL WEIGHT (g) |
| HW                                 | 0.157 x 0.276 [4.0 x 7.0]  | 0.059 [1.5]    | 0.018 [0.45]            | 0.20               |
| JW                                 | 0.197 x 0.276 [5.0 x 7.0]  | 0.079 [2.0]    | 0.018 [0.45]            | 0.30               |
| AW                                 | 0.248 x 0.276 [6.3 x 7.0]  | 0.098 [2.5]    | 0.018 [0.45]            | 0.40               |
| JA                                 | 0.197 x 0.433 [5.0 x 11.0] | 0.079 [2.0]    | 0.020 [0.50]            | 0.44               |
| AA                                 | 0.248 x 0.433 [6.3 x 11.0] | 0.098 [2.5]    | 0.020 [0.50]            | 0.60               |
| BB                                 | 0.315 x 0.453 [8.0 x 11.5] | 0.138 [3.5]    | 0.024 [0.60]            | 0.95               |

| DIMENSIONS in inches [millimeters] |                             |                   |                            |                       |
|------------------------------------|-----------------------------|-------------------|----------------------------|-----------------------|
| CASE CODE                          | NOMINAL CASE SIZE<br>D x L  | LEAD SPACING<br>S | NOMINAL LEAD DIAMETER<br>D | TYPICAL WEIGHT<br>(g) |
| CC                                 | 0.394 x 0.492 [10.0 x 12.5] | 0.197 [5.0]       | 0.024 [0.60]               | 1.48                  |
| CD                                 | 0.394 x 0.630 [10.0 x 16.0] | 0.197 [5.0]       | 0.024 [0.60]               | 1.75                  |
| CG                                 | 0.394 x 0.787 [10.0 x 20.0] | 0.197 [5.0]       | 0.024 [0.60]               | 2.37                  |
| DG                                 | 0.492 x 0.787 [12.5 x 20.0] | 0.197 [5.0]       | 0.024 [0.60]               | 3.73                  |
| DK                                 | 0.492 x 0.984 [12.5 x 25.0] | 0.197 [5.0]       | 0.024 [0.60]               | 4.85                  |
| EK                                 | 0.630 x 0.984 [16.0 x 25.0] | 0.295 [7.5]       | 0.031 [0.80]               | 7.08                  |
| EN                                 | 0.630 x 1.240 [16.0 x 31.5] | 0.295 [7.5]       | 0.031 [0.80]               | 8.94                  |
| ER                                 | 0.630 x 1.398 [16.0 x 35.5] | 0.295 [7.5]       | 0.031 [0.80]               | 10.50                 |
| FR                                 | 0.709 x 1.398 [18.0 x 35.5] | 0.295 [7.5]       | 0.031 [0.80]               | 12.53                 |
| FV                                 | 0.709 x 1.575 [18.0 x 40.0] | 0.295 [7.5]       | 0.031 [0.80]               | 15.71                 |

**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 <sup>(3)</sup> | X (Max.)    |
| Formed and cut                     | F                | 0.157 [4.0]  | 0.197 [5.0] | 0.059 [1.5] | -                | 0.059 [1.5] |
|                                    |                  | 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                | 0.157 [4.0]  | 0.197 [5.0] | 0.059 [1.5] | 0.043 [1.1]      | 0.059 [1.5] |
|                                    |                  | 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]      | -           |

**Notes**

- Coding of cut or formed lead to be added to the end of type number in 15<sup>th</sup> position (with position 14 coded "6").
- (1) Formed lead.
- (2) Lead thickness Ø d depends on capacitor specification.
- (3) Lead protrusion at bottom of tape.

| TAPED CAPACITORS FOR AUTOMATIC INSERTION SYSTEMS in inches [millimeters] |  |                            |               |               |  |
|--|--|----------------------------|---------------|---------------|--|
| PACKAGING  | LEAD CODE<br>14 <sup>th</sup> AND 15 <sup>th</sup><br>DIGITS OF PN | SPECIFICATION              |               | LEAD<br>SPACE | CAPACITOR SIZES AVAILABLE  |
|  |  | LEAD STYLE                 | + -<br>LEADER |               |  |
| Ammo pack  | 8P   | Formed lead <sup>(1)</sup> | -             | 0.197 [5.0]   | 0.157 x 0.276 - 0.492 x 0.787 [4.0 x 7.0 - 12.5 x 20.0]<br>Case codes HW, JW, AW, JA, AA, BB, CC, CD, DG |

**Notes**

- The ammo pack code is to be added at the end of part number in the 14<sup>th</sup> and 15<sup>th</sup> 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.
- <sup>(1)</sup> 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<br>(Diameter x Length) |                              |                               |                              |                               |                               |                        |                        |
|  | FORMED LEAD TYPE                 |                              |                               |                              |                               |                               | STRAIGHT LEAD TYPE     |                        |
|  | 0.157 x 0.276<br>[4.0 x 7.0]     | 0.197 x 0.276<br>[5.0 x 7.0] | 0.197 x 0.433<br>[5.0 x 11.0] | 0.248 x 0.276<br>[6.3 x 7.0] | 0.248 x 0.433<br>[6.3 x 11.0] | 0.315 x 0.453<br>[8.0 x 11.5] | 0.394 [10.0]<br>(Dia.) | 0.492 [12.5]<br>(Dia.) |
| Ø d - Lead-wire diameter                 | 0.018 [0.45]                     | 0.018 [0.45]                 | 0.020 [0.5]                   | 0.018 [0.45]                 | 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]                 | 0.500 [12.7]                  | 0.500 [12.7]                  | 0.500 [12.7]           | 0.591 [15.0]           |
| P <sub>0</sub> - Feed hole pitch         | 0.500 [12.7]                     | 0.500 [12.7]                 | 0.500 [12.7]                  | 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]                   | 0.197 [5.0]                   | 0.197 [5.0]            | 0.197 [5.0]            |
| K - Clinch height                        | 0.059 [1.5]                      | 0.059 [1.5]                  | 0.098 [2.5]                   | 0.059 [1.5]                  | 0.098 [2.5]                   | 0.157 [4.0]                   | -                      | -                      |
| H - Height of component                  | 0.689 [17.5]                     | 0.689 [17.5]                 | 0.728 [18.5]                  | 0.689 [17.5]                 | 0.728 [18.5]                  | 0.787 [20.0]                  | 0.728 [18.5]           | 0.630 [16.0]           |
| H <sub>0</sub> - Lead-wire clinch height | 0.630 [16.0]                     | 0.630 [16.0]                 | 0.630 [16.0]                  | 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]                  | 0.709 [18.0]                  | 0.709 [18.0]           | 0.709 [18.0]           |
| W <sub>0</sub> - Hold down tape width    | 0.512 [13.0]                     | 0.512 [13.0]                 | 0.512 [13.0]                  | 0.512 [13.0]                 | 0.512 [13.0]                  | 0.512 [13.0]                  | 0.512 [13.0]           | 0.512 [13.0]           |
| D <sub>0</sub> - Feed hole diameter      | 0.157 [4.0]                      | 0.157 [4.0]                  | 0.157 [4.0]                   | 0.157 [4.0]                  | 0.157 [4.0]                   | 0.157 [4.0]                   | 0.157 [4.0]            | 0.157 [4.0]            |
| t - Total tape thickness                 | 0.157 [4.0]                      | 0.157 [4.0]                  | 0.157 [4.0]                   | 0.157 [4.0]                  | 0.157 [4.0]                   | 0.157 [4.0]                   | 0.157 [4.0]            | 0.157 [4.0]            |

**ORDERING EXAMPLE**

Electrolytic capacitor 515D series: 515D 107 M 6R3 JA 6 A E3

| DESCRIPTION |                                       |
|-------------|---------------------------------------|
| CODE        | EXPLANATION                           |
| 515D        | Product type                          |
| 107         | Capacitance value (100 $\mu$ 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 (case codes HW, JW, AW, JA, AA, BB, CC, CD, CG, DG only) |

| ELECTRICAL DATA AND ORDERING INFORMATION           |                   |                             |  |                                 |
|--|-------------------|-----------------------------|--|---------------------------------|
| CAPACITANCE<br>( $\mu$ F)                          | PART NUMBER       | NOMINAL CASE SIZE<br>D x L  | MAX. RIPPLE<br>AT + 85 °C<br>120 Hz (mA) | MAX. DF<br>AT + 20 °C<br>120 Hz |
| <b>6.3 WV<sub>DC</sub> AT + 85 °C, SURGE = 8 V</b> |                   |                             |  |                                 |
| 22.0   | 515D226M6R3JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 34.0                                     | 0.24                            |
| 33.0   | 515D336M6R3JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 42.0                                     | 0.24                            |
| 47.0   | 515D476M6R3JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 50.0                                     | 0.24                            |
| 100.0  | 515D107M6R3JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 77.0                                     | 0.24                            |
| 220.0  | 515D227M6R3AA6AE3 | 0.248 x 0.433 [6.3 x 11.0]  | 215.0                                    | 0.24                            |
| 330.0  | 515D337M6R3AA6AE3 | 0.248 x 0.433 [6.3 x 11.0]  | 265.0                                    | 0.24                            |
| 470.0  | 515D477M6R3BB6AE3 | 0.315 x 0.453 [8.0 x 11.5]  | 360.0                                    | 0.24                            |
| 1000.0   | 515D108M6R3CC6AE3 | 0.394 x 0.492 [10.0 x 12.5] | 570.0                                    | 0.24                            |
| 2200.0   | 515D228M6R3DG6AE3 | 0.492 x 0.787 [12.5 x 20.0] | 1050.0                                   | 0.24                            |
| 3300.0   | 515D338M6R3DG6AE3 | 0.492 x 0.787 [12.5 x 20.0] | 1250.0                                   | 0.24                            |
| 4700.0   | 515D478M6R3EK6AE3 | 0.630 x 0.984 [16.0 x 25.0] | 1700.0                                   | 0.24                            |
| 6800.0   | 515D688M6R3EK6AE3 | 0.630 x 0.984 [16.0 x 25.0] | 1900.0                                   | 0.24                            |
| 10 000.0   | 515D109M6R3EN6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 2250.0                                   | 0.24                            |
| 15 000.0   | 515D159M6R3FR6AE3 | 0.709 x 1.398 [18.0 x 35.5] | 2680.0                                   | 0.24                            |
| 18 000.0   | 515D189M6R3FV6AE3 | 0.709 x 1.575 [18.0 x 40.0] | 2750.0                                   | 0.24                            |
| <b>10 WV<sub>DC</sub> AT + 85 °C, SURGE = 13 V</b> |                   |                             |  |                                 |
| 22.0   | 515D226M010JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 38.0                                     | 0.20                            |
| 33.0   | 515D336M010JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 47.0                                     | 0.20                            |
| 47.0   | 515D476M010JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 59.0                                     | 0.20                            |
| 100.0  | 515D107M010JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 145.0                                    | 0.20                            |
| 220.0  | 515D227M010AA6AE3 | 0.248 x 0.433 [6.3 x 11.0]  | 230.0                                    | 0.20                            |
| 330.0  | 515D337M010BB6AE3 | 0.315 x 0.453 [8.0 x 11.5]  | 330.0                                    | 0.20                            |
| 470.0  | 515D477M010BB6AE3 | 0.315 x 0.453 [8.0 x 11.5]  | 390.0                                    | 0.20                            |
| 1000.0   | 515D108M010CD6AE3 | 0.394 x 0.630 [10.0 x 16.0] | 630.0                                    | 0.20                            |
| 2200.0   | 515D228M010DG6AE3 | 0.492 x 0.787 [12.5 x 20.0] | 1100.0                                   | 0.20                            |
| 3300.0   | 515D338M010DK6AE3 | 0.492 x 0.984 [12.5 x 25.0] | 1400.0                                   | 0.20                            |
| 4700.0   | 515D478M010EK6AE3 | 0.630 x 0.984 [16.0 x 25.0] | 1800.0                                   | 0.20                            |
| 6800.0   | 515D688M010EN6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 2150.0                                   | 0.20                            |
| 10 000.0   | 515D109M010FR6AE3 | 0.709 x 1.398 [18.0 x 35.5] | 2500.0                                   | 0.20                            |
| 15 000.0   | 515D159M010FV6AE3 | 0.709 x 1.575 [18.0 x 40.0] | 2720.0                                   | 0.20                            |
| <b>16 WV<sub>DC</sub> AT + 85 °C, SURGE = 20 V</b> |                   |                             |  |                                 |
| 10.0   | 515D106M016JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 28.0                                     | 0.16                            |
| 22.0   | 515D226M016JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 44.0                                     | 0.16                            |
| 33.0   | 515D336M016JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 57.0                                     | 0.16                            |
| 47.0   | 515D476M016JA6AE3 | 0.197 x 0.433 [5.0 x 11.0]  | 168.0                                    | 0.16                            |



| <b>ELECTRICAL DATA AND ORDERING INFORMATION</b>    |                    |                                    |   |  |
|--|--------------------|------------------------------------|---|--|
| <b>CAPACITANCE<br/>(<math>\mu</math>F)</b>         | <b>PART NUMBER</b> | <b>NOMINAL CASE SIZE<br/>D x L</b> | <b>MAX. RIPPLE<br/>AT + 85 °C<br/>120 Hz (mA)</b> | <b>MAX. DF<br/>AT + 20 °C<br/>120 Hz</b> |
| <b>16 WV<sub>DC</sub> AT + 85 °C, SURGE = 20 V</b> |                    |                                    |   |  |
| 100.0  | 515D107M016AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 175.0   | 0.16                                     |
| 220.0  | 515D227M016BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 300.0   | 0.16                                     |
| 330.0  | 515D337M016BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 360.0   | 0.16                                     |
| 470.0  | 515D477M016CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 470.0   | 0.16                                     |
| 1000.0   | 515D108M016CG6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 790.0   | 0.16                                     |
| 2200.0   | 515D228M016DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 1350.0  | 0.16                                     |
| 3300.0   | 515D338M016EK6AE3  | 0.630 x 0.984 [16.0 x 25.0]        | 1700.0  | 0.16                                     |
| 4700.0   | 515D478M016EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 2100.0  | 0.16                                     |
| 6800.0   | 515D688M016FR6AE3  | 0.709 x 1.398 [18.0 x 35.5]        | 2500.0  | 0.16                                     |
| 10 000.0   | 515D109M016FV6AE3  | 0.709 x 1.575 [18.0 x 40.0]        | 2640.0  | 0.16                                     |
| <b>25 WV<sub>DC</sub> AT + 85 °C, SURGE = 32 V</b> |                    |                                    |   |  |
| 4.7  | 515D475M025JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 30.0  | 0.14                                     |
| 10.0   | 515D106M025JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 33.0  | 0.14                                     |
| 22.0   | 515D226M025JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 51.0  | 0.14                                     |
| 33.0   | 515D336M025JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 63.0  | 0.14                                     |
| 47.0   | 515D476M025JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 115.0   | 0.14                                     |
| 100.0  | 515D107M025AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 185.0   | 0.14                                     |
| 220.0  | 515D227M025BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 320.0   | 0.14                                     |
| 330.0  | 515D337M025CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 420.0   | 0.14                                     |
| 470.0  | 515D477M025CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 540.0   | 0.14                                     |
| 1000.0   | 515D108M025DG6AE3  | 0.492 x 0.787 [12.5 x 20.0]        | 950.0   | 0.14                                     |
| 2200.0   | 515D228M025EK6AE3  | 0.630 x 0.984 [16.0 x 25.0]        | 1550.0  | 0.14                                     |
| 3300.0   | 515D338M025EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 1950.0  | 0.14                                     |
| 4700.0   | 515D478M025FR6AE3  | 0.709 x 1.398 [18.0 x 35.5]        | 2360.0  | 0.14                                     |
| <b>35 WV<sub>DC</sub> AT + 85 °C, SURGE = 44 V</b> |                    |                                    |   |  |
| 4.7  | 515D475M035JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 24.0  | 0.12                                     |
| 10.0   | 515D106M035JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 36.0  | 0.12                                     |
| 22.0   | 515D226M035JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 57.0  | 0.12                                     |
| 33.0   | 515D336M035JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 105.0   | 0.12                                     |
| 47.0   | 515D476M035AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 140.0   | 0.12                                     |
| 100.0  | 515D107M035BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 230.0   | 0.12                                     |
| 220.0  | 515D227M035CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 370.0   | 0.12                                     |
| 330.0  | 515D337M035CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 490.0   | 0.12                                     |
| 470.0  | 515D477M035CG6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 640.0   | 0.12                                     |
| 1000.0   | 515D108M035DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 1100.0  | 0.12                                     |
| 2200.0   | 515D228M035EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 1850.0  | 0.12                                     |
| 3300.0   | 515D338M035FR6AE3  | 0.709 x 1.382 [18.0 x 35.5]        | 2220.0  | 0.12                                     |
| 4700.0   | 515D478M035FV6AE3  | 0.709 x 1.575 [18.0 x 40.0]        | 2490.0  | 0.12                                     |
| <b>50 WV<sub>DC</sub> AT + 85 °C, SURGE = 63 V</b> |                    |                                    |   |  |
| 0.10   | 515D104M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 1.0   | 0.10                                     |
| 0.22   | 515D224M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 2.3   | 0.10                                     |
| 0.33   | 515D334M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 3.5   | 0.10                                     |
| 0.47   | 515D474M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 5.0   | 0.10                                     |
| 1.0  | 515D105M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 10.0  | 0.10                                     |
| 2.2  | 515D225M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 19.0  | 0.10                                     |
| 3.3  | 515D335M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 24.0  | 0.10                                     |
| 4.7  | 515D475M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 29.0  | 0.10                                     |



| <b>ELECTRICAL DATA AND ORDERING INFORMATION</b>      |                    |                                    |   |  |
|--|--------------------|------------------------------------|---|--|
| <b>CAPACITANCE<br/>(<math>\mu</math>F)</b>           | <b>PART NUMBER</b> | <b>NOMINAL CASE SIZE<br/>D x L</b> | <b>MAX. RIPPLE<br/>AT + 85 °C<br/>120 Hz (mA)</b> | <b>MAX. DF<br/>AT + 20 °C<br/>120 Hz</b> |
| <b>50 WV<sub>DC</sub> AT + 85 °C, SURGE = 63 V</b>   |                    |                                    |   |  |
| 10.0   | 515D106M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 44.0  | 0.10                                     |
| 22.0   | 515D226M050JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 95.0  | 0.10                                     |
| 33.0   | 515D336M050AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 125.0   | 0.10                                     |
| 47.0   | 515D476M050AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 150.0   | 0.10                                     |
| 100.0  | 515D107M050BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 250.0   | 0.10                                     |
| 220.0  | 515D227M050CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 440.0   | 0.10                                     |
| 330.0  | 515D337M050CG6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 580.0   | 0.10                                     |
| 470.0  | 515D477M050DG6AE3  | 0.492 x 0.787 [12.5 x 20.0]        | 760.0   | 0.10                                     |
| 1000.0   | 515D108M050EK6AE3  | 0.630 x 0.984 [16.0 x 25.0]        | 1350.0  | 0.10                                     |
| 2200.0   | 515D228M050FR6AE3  | 0.709 x 1.398 [18.0 x 35.5]        | 2090.0  | 0.10                                     |
| <b>63 WV<sub>DC</sub> AT + 85 °C, SURGE = 79 V</b>   |                    |                                    |   |  |
| 4.7  | 515D475M063JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 45.0  | 0.08                                     |
| 10.0   | 515D106M063JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 70.0  | 0.08                                     |
| 22.0   | 515D226M063AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 115.0   | 0.08                                     |
| 33.0   | 515D336M063AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 140.0   | 0.08                                     |
| 47.0   | 515D476M063BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 190.0   | 0.08                                     |
| 100.0  | 515D107M063CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 300.0   | 0.08                                     |
| 220.0  | 515D227M063CG6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 490.0   | 0.08                                     |
| 330.0  | 515D337M063DG6AE3  | 0.492 x 0.787 [12.5 x 20.0]        | 680.0   | 0.08                                     |
| 470.0  | 515D477M063DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 880.0   | 0.08                                     |
| 1000.0   | 515D108M063EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 1550.0  | 0.08                                     |
| 2200.0   | 515D228M063FV6AE3  | 0.709 x 1.575 [18.0 x 40.0]        | 2200.0  | 0.08                                     |
| <b>100 WV<sub>DC</sub> AT + 85 °C, SURGE = 125 V</b> |                    |                                    |   |  |
| 0.10   | 515D104M100JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 2.1   | 0.08                                     |
| 0.22   | 515D224M100JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 4.7   | 0.08                                     |
| 0.33   | 515D334M100JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 7.0   | 0.08                                     |
| 0.47   | 515D474M100JA6AE3  | 0.197 x .0433 [5.0 x 11.0]         | 10.0  | 0.08                                     |
| 1.0  | 515D105M100JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 21.0  | 0.08                                     |
| 2.2  | 515D225M100JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 30.0  | 0.08                                     |
| 3.3  | 515D335M100JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 40.0  | 0.08                                     |
| 4.7  | 515D475M100JA6AE3  | 0.197 x 0.433 [5.0 x 11.0]         | 45.0  | 0.08                                     |
| 10.0   | 515D106M100AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 75.0  | 0.08                                     |
| 22.0   | 515D226M100BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 130.0   | 0.08                                     |
| 33.0   | 515D336M100CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 170.0   | 0.08                                     |
| 47.0   | 515D476M100CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 230.0   | 0.08                                     |
| 100.0  | 515D107M100DG6AE3  | 0.492 x 0.787 [12.5 x 20.0]        | 400.0   | 0.08                                     |
| 220.0  | 515D227M100EK6AE3  | 0.630 x 0.984 [16.0 x 25.0]        | 710.0   | 0.08                                     |
| 330.0  | 515D337M100EK6AE3  | 0.630 x 0.984 [16.0 x 25.0]        | 860.0   | 0.08                                     |
| 470.0  | 515D477M100EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 1100.0  | 0.08                                     |
| 1000.0   | 515D108M100FV6AE3  | 0.709 x 1.575 [18.0 x 40.0]        | 1690.0  | 0.08                                     |
| <b>160 WV<sub>DC</sub> AT + 85 °C, SURGE = 200 V</b> |                    |                                    |   |  |
| 0.47   | 515D474M160AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 12.0  | 0.20                                     |
| 1.0  | 515D105M160AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 17.0  | 0.20                                     |
| 2.2  | 515D225M160AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 26.0  | 0.20                                     |
| 3.3  | 515D335M160BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 35.0  | 0.20                                     |
| 4.7  | 515D475M160BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 40.0  | 0.20                                     |
| 10.0   | 515D106M160CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 65.0  | 0.20                                     |
| 22.0   | 515D226M160CG6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 110.0   | 0.20                                     |
| 33.0   | 515D336M160DG6AE3  | 0.492 x 0.787 [12.5 x 20.0]        | 150.0   | 0.20                                     |
| 47.0   | 515D476M160DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 180.0   | 0.20                                     |
| 100.0  | 515D107M160EK6AE3  | 0.630 x 0.984 [16.0 x 25.0]        | 300.0   | 0.20                                     |
| 220.0  | 515D227M160FR6AE3  | 0.709 x 1.398 [18.0 x 35.5]        | 510.0   | 0.20                                     |



| <b>ELECTRICAL DATA AND ORDERING INFORMATION</b>      |                    |                                    |   |  |
|--|--------------------|------------------------------------|---|--|
| <b>CAPACITANCE<br/>(<math>\mu</math>F)</b>           | <b>PART NUMBER</b> | <b>NOMINAL CASE SIZE<br/>D x L</b> | <b>MAX. RIPPLE<br/>AT + 85 °C<br/>120 Hz (mA)</b> | <b>MAX. DF<br/>AT + 20 °C<br/>120 Hz</b> |
| <b>200 WV<sub>DC</sub> AT + 85 °C, SURGE = 250 V</b> |                    |                                    |   |  |
| 0.47   | 515D474M200AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 12.0  | 0.20                                     |
| 1.0  | 515D105M200AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 17.0  | 0.20                                     |
| 2.2  | 515D225M200AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 26.0  | 0.20                                     |
| 3.3  | 515D335M200BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 35.0  | 0.20                                     |
| 4.7  | 515D475M200CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 45.0  | 0.20                                     |
| 10.0   | 515D106M200CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 70.0  | 0.20                                     |
| 22.0   | 515D226M200CG6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 110.0   | 0.20                                     |
| 33.0   | 515D336M200DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 160.0   | 0.20                                     |
| 47.0   | 515D476M200DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 180.0   | 0.20                                     |
| 100.0  | 515D107M200EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 330.0   | 0.20                                     |
| 220.0  | 515D227M200FV6AE3  | 0.709 x 1.575 [18.0 x 40.0]        | 520.0   | 0.20                                     |
| <b>250 WV<sub>DC</sub> AT + 85 °C, SURGE = 300 V</b> |                    |                                    |   |  |
| 0.47   | 515D474M250AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 12.0  | 0.20                                     |
| 1.0  | 515D105M250AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 17.0  | 0.20                                     |
| 2.2  | 515D225M250BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 30.0  | 0.20                                     |
| 3.3  | 515D335M250CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 35.0  | 0.20                                     |
| 4.7  | 515D475M250CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 45.0  | 0.20                                     |
| 10.0   | 515D106M250CG6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 70.0  | 0.20                                     |
| 33.0   | 515D336M250DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 160.0   | 0.20                                     |
| 47.0   | 515D476M250EK6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 210.0   | 0.20                                     |
| 100.0  | 515D107M250FR6AE3  | 0.709 x 1.575 [18.0 x 40.0]        | 340.0   | 0.20                                     |
| <b>315 WV<sub>DC</sub> AT + 85 °C, SURGE = 365 V</b> |                    |                                    |   |  |
| 1.0  | 515D105M315AA6AE3  | 0.248 x 0.433 [6.3 x 11.0]         | 17.0  | 0.20                                     |
| 2.2  | 515D225M315BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 30.0  | 0.20                                     |
| 3.3  | 515D335M315CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 35.0  | 0.20                                     |
| 4.7  | 515D475M315CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 45.0  | 0.20                                     |
| 10.0   | 515D106M315CG6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 70.0  | 0.20                                     |
| 22.0   | 515D226M315DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 120.0   | 0.20                                     |
| 33.0   | 515D336M315EK6AE3  | 0.630 x 0.984 [16.0 x 25.0]        | 150.0   | 0.20                                     |
| 47.0   | 515D476M315EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 190.0   | 0.20                                     |
| 100.0  | 515D107M315FV6AE3  | 0.709 x 1.575 [18.0 x 40.0]        | 340.0   | 0.20                                     |
| <b>350 WV<sub>DC</sub> AT + 85 °C, SURGE = 400 V</b> |                    |                                    |   |  |
| 1.0  | 515D105M350BB6AE3  | 0.315 x .453 [8.0 x 11.5]          | 18.0  | 0.25                                     |
| 2.2  | 515D225M350CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 28.0  | 0.25                                     |
| 3.3  | 515D335M350CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 35.0  | 0.25                                     |
| 4.7  | 515D475M350CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 40.0  | 0.25                                     |
| 10.0   | 515D106M350DG6AE3  | 0.492 x 0.787 [12.5 x 20.0]        | 70.0  | 0.25                                     |
| 22.0   | 515D226M350DK6AE3  | 0.492 x 0.984 [12.5 x 25.0]        | 110.0   | 0.25                                     |
| 33.0   | 515D336M350EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 140.0   | 0.25                                     |
| 47.0   | 515D476M350FR6AE3  | 0.709 x 1.398 [18.0 x 35.5]        | 220.0   | 0.25                                     |
| <b>400 WV<sub>DC</sub> AT + 85 °C, SURGE = 450 V</b> |                    |                                    |   |  |
| 1.0  | 515D105M400BB6AE3  | 0.315 x 0.453 [8.0 x 11.5]         | 18.0  | 0.25                                     |
| 2.2  | 515D225M400CC6AE3  | 0.394 x 0.492 [10.0 x 12.5]        | 28.0  | 0.25                                     |
| 3.3  | 515D335M400CD6AE3  | 0.394 x 0.630 [10.0 x 16.0]        | 35.0  | 0.25                                     |
| 4.7  | 515D475M400CD6AE3  | 0.394 x 0.787 [10.0 x 20.0]        | 45.0  | 0.25                                     |
| 10.0   | 515D106M400DG6AE3  | 0.492 x 0.787 [12.5 x 20.0]        | 70.0  | 0.25                                     |
| 22.0   | 515D226M400DK6AE3  | 0.630 x 0.984 [16.0 x 25.0]        | 110.0   | 0.25                                     |
| 33.0   | 515D336M400EN6AE3  | 0.630 x 1.240 [16.0 x 31.5]        | 140.0   | 0.25                                     |
| 47.0   | 515D476M400FR6AE3  | 0.709 x 1.398 [18.0 x 35.5]        | 220.0   | 0.25                                     |





| <b>ELECTRICAL DATA AND ORDERING INFORMATION</b>      |                   |                             |                                    |                           |
|--|-------------------|-----------------------------|------------------------------------|---------------------------|
| CAPACITANCE (μF)                                     | PART NUMBER       | NOMINAL CASE SIZE D x L     | MAX. RIPPLE AT + 85 °C 120 Hz (mA) | MAX. DF AT + 20 °C 120 Hz |
| <b>450 WV<sub>DC</sub> AT + 85 °C, SURGE = 500 V</b> |                   |                             |                                    |                           |
| 1.0  | 515D105M450CC6AE3 | 0.394 x 0.492 [10.0 x 12.5] | 19.0                               | 0.25                      |
| 2.2  | 515D225M450CD6AE3 | 0.394 x 0.630 [10.0 x 16.0] | 29.0                               | 0.25                      |
| 4.7  | 515D475M450DG6AE3 | 0.492 x 0.787 [12.5 x 20.0] | 50.0                               | 0.25                      |
| 10.0   | 515D106M450EK6AE3 | 0.492 x 0.984 [12.5 x 25.0] | 75.0                               | 0.25                      |
| 22.0   | 515D226M450EN6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 110.0                              | 0.25                      |
| 33.0   | 515D336M450FR6AE3 | 0.709 x 1.398 [18.0 x 35.5] | 170.0                              | 0.25                      |

| <b>LOW PROFILE RATINGS in inches [millimeters]</b> |                   |                           |                                    |                           |
|--|-------------------|---------------------------|------------------------------------|---------------------------|
| CAPACITANCE (μF)                                   | PART NUMBER       | NOMINAL CASE SIZE D x L   | MAX. RIPPLE AT + 85 °C 120 Hz (mA) | MAX. DF AT + 20 °C 120 Hz |
| <b>6.3 WV<sub>DC</sub> AT + 85 °C, SURGE = 8 V</b> |                   |                           |                                    |                           |
| 22.0   | 515D226M6R3HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 34.0                               | 0.24                      |
| 33.0   | 515D336M6R3JW6AE3 | 0.197 x 0.276 [5.0 x 7.0] | 42.0                               | 0.24                      |
| 47.0   | 515D476M6R3JW6AE3 | 0.197 x 0.276 [5.0 x 7.0] | 50.0                               | 0.24                      |
| 100.0  | 515D107M6R3AW6AE3 | 0.248 x 0.276 [6.3 x 7.0] | 77.0                               | 0.24                      |
| <b>10 WV<sub>DC</sub> AT + 85 °C, SURGE = 13 V</b> |                   |                           |                                    |                           |
| 22.0   | 515D226M010JW6AE3 | 0.197 x 0.276 [5.0 x 7.0] | 38.0                               | 0.20                      |
| 33.0   | 515D336M010JW6AE3 | 0.197 x 0.276 [5.0 x 7.0] | 47.0                               | 0.20                      |
| 47.0   | 515D476M010AW6AE3 | 0.248 x 0.276 [6.3 x 7.0] | 59.0                               | 0.20                      |
| <b>16 WV<sub>DC</sub> AT + 85 °C, SURGE = 20 V</b> |                   |                           |                                    |                           |
| 10.0   | 515D106M016HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 28.0                               | 0.16                      |
| 22.0   | 515D226M016JW6AE3 | 0.197 x 0.276 [5.0 x 7.0] | 44.0                               | 0.16                      |
| 33.0   | 515D336M016AW6AE3 | 0.248 x 0.276 [6.3 x 7.0] | 57.0                               | 0.16                      |
| 47.0   | 515D476M016AW6AE3 | 0.248 x 0.276 [6.3 x 7.0] | 68.0                               | 0.16                      |
| <b>25 WV<sub>DC</sub> AT + 85 °C, SURGE = 32 V</b> |                   |                           |                                    |                           |
| 10.0   | 515D106M025JW6AE3 | 0.197 x 0.276 [5.0 x 7.0] | 33.0                               | 0.14                      |
| 22.0   | 515D226M025AW6AE3 | 0.248 x 0.276 [6.3 x 7.0] | 51.0                               | 0.14                      |
| 33.0   | 515D336M025AW6AE3 | 0.248 x 0.276 [6.3 x 7.0] | 63.0                               | 0.14                      |
| <b>35 WV<sub>DC</sub> AT + 85 °C, SURGE = 44 V</b> |                   |                           |                                    |                           |
| 4.7  | 515D475M035HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 24.0                               | 0.12                      |
| 10.0   | 515D106M035JW6AE3 | 0.197 x 0.276 [5.0 x 7.0] | 36.0                               | 0.12                      |
| 22.0   | 515D226M035AW6AE3 | 0.248 x 0.276 [6.3 x 7.0] | 57.0                               | 0.12                      |
| <b>50 WV<sub>DC</sub> AT + 85 °C, SURGE = 63 V</b> |                   |                           |                                    |                           |
| 0.10   | 515D104M050JW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 1.0                                | 0.10                      |
| 0.22   | 515D224M050HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 2.3                                | 0.10                      |
| 0.33   | 515D334M050HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 3.5                                | 0.10                      |
| 0.47   | 515D474M050HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 5.0                                | 0.10                      |
| 1.0  | 515D105M050HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 10.0                               | 0.10                      |
| 2.2  | 515D225M050HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 19.0                               | 0.10                      |
| 3.3  | 515D335M050HW6AE3 | 0.157 x 0.276 [4.0 x 7.0] | 24.0                               | 0.10                      |
| 4.7  | 515D475M050JW6AE3 | 0.197 x 0.276 [5.0 x 7.0] | 29.0                               | 0.10                      |
| 10.0   | 515D106M050AW6AE3 | 0.248 x 0.276 [6.3 x 7.0] | 44.0                               | 0.10                      |





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Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
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- 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.);

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## 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).



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