

Aluminum Capacitors + 85 °C, Powerlytic[®] Electrolytics



| QUICK REFERENCE DATA | |
|--|---|
| DESCRIPTION | VALUE |
| Operating temperature | - 20 °C to + 85 °C |
| Tolerance on C _R : | |
| 3 WV _{DC} to 75 WV _{DC} | + 75 %, - 10 % |
| 100 WV _{DC} to 450 WV _{DC} | + 50 %, - 10 % |
| Dissipation Factor: | |
| 3 WV _{DC} and 6 WV _{DC} | 230 % |
| 10 WV _{DC} and 15 WV _{DC} | 150 % |
| 25 WV _{DC} and 30 WV _{DC} | 60 % |
| 40 WV _{DC} and 50 WV _{DC} | 45 % |
| 75 WV _{DC} and 100 WV _{DC} | 30 % |
| 150 WV _{DC} to 450 WV _{DC} | 18 % |
| Ripple current | 20 to 3140 maximum amperes rms at 120 Hz and + 120 °C, depending upon capacitance |
| Useful life at 85 °C | 500 h |

FEATURES

- Designed for applications requiring greatest possible capacitance in small physical case sizes
- Supplement original Type 36D can-type capacitors, offering lower capacitance values in smaller sizes with axial leads
- Welds at all critical anode and cathode terminals eliminate riveted or pressure connections to assure freedom from open circuits even when operated in the microvolt or millivolt signal range
- Improved molded phenolic and seals
- Pressure-sensitive safety vent
- Service life of 10 years or more in normal circuit applications
- Capacitors listed have outer plastic-film insulation. For bare case, change last character of part number from 6 to 0 and subtract 0.062" [1.575 mm] from diameter and 0.125" [3.175 mm] from length
- Axial lead
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

| DIMENSIONS in inches [millimeters] | | | | | | | | |
|------------------------------------|----------------|----------------|-----------|----------------|----------------|-----------|----------------|----------------|
| CASE CODE | D | L | CASE CODE | D | L | CASE CODE | D | L |
| | ± 0.020 [0.51] | ± 0.062 [1.58] | | ± 0.020 [0.51] | ± 0.062 [1.58] | | ± 0.020 [0.51] | ± 0.062 [1.58] |
| EE | 0.510 [13.0] | 1.141 [29.0] | GJ | 0.760 [19.3] | 1.641 [41.7] | JE | 1.010 [25.7] | 1.141 [29.0] |
| EJ | 0.510 [13.0] | 1.641 [41.7] | GL | 0.760 [19.3] | 2.141 [54.4] | JJ | 1.010 [25.7] | 1.641 [41.7] |
| EL | 0.510 [13.0] | 2.141 [54.4] | GP | 0.760 [19.3] | 2.641 [67.1] | JL | 1.010 [25.7] | 2.141 [54.4] |
| FE | 0.635 [16.1] | 1.141 [29.0] | HE | 0.885 [22.5] | 1.141 [29.0] | JP | 1.010 [25.7] | 2.641 [67.1] |
| FJ | 0.635 [16.1] | 1.641 [41.7] | HJ | 0.885 [22.5] | 1.641 [41.7] | JS | 1.010 [25.7] | 3.141 [79.8] |
| FL | 0.635 [16.1] | 2.141 [54.4] | HL | 0.885 [22.5] | 2.141 [54.4] | JT | 1.010 [25.7] | 3.641 [92.5] |
| FP | 0.635 [16.1] | 2.641 [67.1] | HP | 0.885 [22.5] | 2.641 [67.1] | - | - | - |
| GE | 0.760 [19.3] | 1.141 [29.0] | HS | 0.885 [22.5] | 3.141 [79.8] | - | - | - |

DIMENSIONS AND AVAILABLE FORMS



Tinned copper leads
 No. 20 AWG (0.032" [0.813] Dia.) for D = 0.510" [13.0] and D = 0.635" [16.1]
 No. 18 AWG (0.040" [1.016] Dia.) for D = 0.760" [19.3] and up



ORDERING EXAMPLE

Electrolytic capacitor 39D series: 39D 907 G 003 EJ 6

| DESCRIPTION | |
|-------------|--|
| CODE | EXPLANATION |
| 39D | Product type |
| 907 | Capacitance value (900 µF) |
| G | Tolerance (G = - 10 %/+ 75 %; F = - 10 %/+ 50 %) |
| 003 | Voltage rating at 85 °C (003 = 3 V) |
| EJ | Can size (See dimensions table) |
| 6 | Sleeve and sealing (6 = P.V.C. sleeve) |

Note

- For lead (Pb)-free/RoHS compliant products add suffix "E3" to part number.
Example: 39D907G003EJ6E3

| ELECTRICAL DATA AND ORDERING INFORMATION | | |
|--|-----------|---------------|
| CAPACITANCE (µF) | CASE CODE | PART NUMBER |
| 3 WV_{DC} AT + 85 °C, SURGE = 4 V | | |
| 400 | EE | 39D407G003EE6 |
| 900 | EJ | 39D907G003EJ6 |
| 1300 | EL | 39D138G003EL6 |
| 1400 | GE | 39D148G003GE6 |
| 1800 | FJ | 39D188G003FJ6 |
| 2100 | HE | 39D218G003HE6 |
| 2700 | FL | 39D278G003FL6 |
| 2900 | GJ | 39D298G003GJ6 |
| 3000 | JE | 39D308G003JE6 |
| 3600 | FP | 39D368G003FP6 |
| 4200 | HJ | 39D428G003HJ6 |
| 4300 | GL | 39D438G003GL6 |
| 5700 | GP | 39D578G003GP6 |
| 6000 | JJ | 39D608G003JJ6 |
| 8500 | HP | 39D858G003HP6 |
| 9000 | JL | 39D908G003JL6 |
| 10 000 | HS | 39D109G003HS6 |
| 12 000 | JP | 39D129G003JP6 |
| 15 000 | JS | 39D159G003JS6 |
| 18 000 | JT | 39D189G003JT6 |
| 6 WV_{DC} AT + 85 °C, SURGE = 8 V | | |
| 300 | EE | 39D307G006EE6 |
| 600 | EJ | 39D607G006EJ6 |
| 900 | EL | 39D907G006EL6 |
| 1000 | GE | 39D108G006GE6 |
| 1200 | FJ | 39D128G006FJ6 |
| 1500 | HE | 39D158G006HE6 |
| 1900 | FL | 39D198G006FL6 |
| 2000 | GJ | 39D208G006GJ6 |
| 2100 | JE | 39D218G006JE6 |
| 2500 | FP | 39D258G006FP6 |
| 3000 | GL | 39D308G006GL6 |
| 4000 | GP | 39D408G006GP6 |
| 4200 | JJ | 39D428G006JJ6 |
| 6000 | HP | 39D608G006HP6 |
| 6300 | JL | 39D638G006JL6 |
| 7500 | HS | 39D758G006HS6 |
| 8500 | JP | 39D858G006JP6 |
| 10 000 | JS | 39D109G006JS6 |
| 12 000 | JT | 39D129G006JT6 |



| ELECTRICAL DATA AND ORDERING INFORMATION | | |
|--|------------------|--------------------|
| CAPACITANCE (µF) | CASE CODE | PART NUMBER |
| 10 WV_{DC} AT + 85 °C, SURGE = 12 V | | |
| 250 | EE | 39D257G010EE6 |
| 500 | EJ | 39D507G010EJ6 |
| 800 | EL | 39D807G010EL6 |
| 850 | GE | 39D857G010GE6 |
| 1000 | FJ | 39D108G010FJ6 |
| 1200 | HE | 39D128G010HE6 |
| 1600 | FL | 39D168G010FL6 |
| 1700 | GJ | 39D178G010GJ6 |
| 2100 | FP | 39D218G010FP6 |
| 2500 | GL | 39D258G010GL6 |
| 3400 | GP | 39D348G010GP6 |
| 3500 | JJ | 39D358G010JJ6 |
| 5000 | HP | 39D508G010HP6 |
| 5200 | JL | 39D528G010JL6 |
| 6300 | HS | 39D638G010HS6 |
| 7100 | JP | 39D718G010JP6 |
| 8800 | JS | 39D888G010JS6 |
| 10 000 | JT | 39D109G010JT6 |
| 15 WV_{DC} AT + 85 °C, SURGE = 18 V | | |
| 200 | EE | 39D207G015EE6 |
| 400 | EJ | 39D407G015EJ6 |
| 600 | EL | 39D607G015EL6 |
| 800 | FJ | 39D807G015FJ6 |
| 950 | HE | 39D957G015HE6 |
| 1200 | FL | 39D128G015FL6 |
| 1300 | GJ | 39D138G015GJ6 |
| 1600 | FP | 39D168G015FP6 |
| 1900 | GL | 39D198G015GL6 |
| 2500 | GP | 39D258G015GP6 |
| 2600 | JJ | 39D268G015JJ6 |
| 3800 | HP | 39D388G015HP6 |
| 4000 | JL | 39D408G015JL6 |
| 4700 | HS | 39D478G015HS6 |
| 5300 | JP | 39D538G015JP6 |
| 6600 | JS | 39D668G015JS6 |
| 8000 | JT | 39D808G015JT6 |
| 25 WV_{DC} AT + 85 °C, SURGE = 30 V | | |
| 100 | EE | 39D107G025EE6 |
| 200 | EJ | 39D207G025EJ6 |
| 350 | EL | 39D357G025EL6 |
| 450 | FJ | 39D457G025FJ6 |
| 500 | HE | 39D507G025HE6 |
| 700 | FL | 39D707G025FL6 |
| 750 | GJ | 39D757G025GJ6 |
| 800 | JE | 39D807G025JE6 |
| 950 | FP | 39D957G025FP6 |
| 1000 | GL | 39D108G025GL6 |
| 1100 | HJ | 39D118G025HJ6 |
| 1500 | GP | 39D158G025GP6 |
| 1600 | JJ | 39D168G025JJ6 |
| 1700 | HL | 39D178G025HL6 |
| 2200 | HP | 39D228G025HP6 |
| 2400 | JL | 39D248G025JL6 |
| 2800 | HS | 39D288G025HS6 |
| 3200 | JP | 39D328G025JP6 |
| 4000 | JS | 39D408G025JS6 |
| 4700 | JT | 39D478G025JT6 |



| ELECTRICAL DATA AND ORDERING INFORMATION | | |
|--|------------------|--------------------|
| CAPACITANCE (µF) | CASE CODE | PART NUMBER |
| 30 WV_{DC} AT + 85 °C, SURGE = 40 V | | |
| 75 | EE | 39D756G030EE6 |
| 150 | EJ | 39D157G030EJ6 |
| 250 | EL | 39D257G030EL6 |
| 350 | FJ | 39D357G030FJ6 |
| 400 | HE | 39D407G030HE6 |
| 500 | FL | 39D507G030FL6 |
| 600 | JE | 39D607G030JE6 |
| 700 | FP | 39D707G030FP6 |
| 850 | GL | 39D857G030GL6 |
| 1100 | GP | 39D118G030GP6 |
| 1200 | HL | 39D128G030HL6 |
| 1700 | HP | 39D178G030HP6 |
| 1800 | JL | 39D188G030JL6 |
| 2100 | HS | 39D218G030HS6 |
| 2400 | JP | 39D248G030JP6 |
| 3000 | JS | 39D308G030JS6 |
| 3600 | JT | 39D368G030JT6 |
| 40 WV_{DC} AT + 85 °C, SURGE = 50 V | | |
| 75 | EE | 39D756G040EE6 |
| 150 | EJ | 39D157G040EJ6 |
| 200 | EL | 39D207G040EL6 |
| 250 | GE | 39D257G040GE6 |
| 300 | FJ | 39D307G040FJ6 |
| 350 | HE | 39D357G040HE6 |
| 450 | FL | 39D457G040FL6 |
| 500 | GJ | 39D507G040GJ6 |
| 600 | FP | 39D607G040FP6 |
| 750 | GL | 39D757G040GL6 |
| 1000 | GP | 39D108G040GP6 |
| 1100 | HL | 39D118G040HL6 |
| 1500 | HP | 39D158G040HP6 |
| 1600 | JL | 39D168G040JL6 |
| 1900 | HS | 39D198G040HS6 |
| 2100 | JP | 39D218G040JP6 |
| 2600 | JS | 39D268G040JS6 |
| 3200 | JT | 39D328G040JT6 |
| 50 WV_{DC} AT + 85 °C, SURGE = 65 V | | |
| 50 | EE | 39D506G050EE6 |
| 100 | EJ | 39D107G050EJ6 |
| 150 | EL | 39D157G050EL6 |
| 200 | FJ | 39D207G050FJ6 |
| 250 | HE | 39D257G050HE6 |
| 350 | FL | 39D357G050FL6 |
| 450 | FP | 39D457G050FP6 |
| 500 | GL | 39D507G050GL6 |
| 700 | GP | 39D707G050GP6 |
| 750 | JJ | 39D757G050JJ6 |
| 800 | HL | 39D807G050HL6 |
| 1100 | HP | 39D118G050HP6 |
| 1300 | HS | 39D138G050HS6 |
| 1500 | JP | 39D158G050JP6 |
| 1900 | JS | 39D198G050JS6 |
| 2300 | JT | 39D238G050JT6 |



| ELECTRICAL DATA AND ORDERING INFORMATION | | |
|--|------------------|--------------------|
| CAPACITANCE (µF) | CASE CODE | PART NUMBER |
| 75 WV_{DC} AT + 85 °C, SURGE = 95 V | | |
| 30 | EE | 39D306G075EE6 |
| 75 | EJ | 39D756G075EJ6 |
| 100 | EL | 39D107G075EL6 |
| 150 | FJ | 39D157G075FJ6 |
| 200 | FL | 39D207G075FL6 |
| 250 | JE | 39D257G075JE6 |
| 300 | FP | 39D307G075FP6 |
| 350 | GL | 39D357G075GL6 |
| 450 | GP | 39D457G075GP6 |
| 500 | HL | 39D507G075HL6 |
| 700 | HP | 39D707G075HP6 |
| 750 | JL | 39D757G075JL6 |
| 850 | HS | 39D857G075HS6 |
| 1000 | JP | 39D108G075JP6 |
| 1200 | JS | 39D128G075JS6 |
| 1500 | JT | 39D158G075JT6 |
| 100 WV_{DC} AT + 85 °C, SURGE = 125 V | | |
| 15 | EE | 39D156F100EE6 |
| 35 | EJ | 39D356F100EJ6 |
| 55 | EL | 39D556F100EL6 |
| 60 | GE | 39D606F100GE6 |
| 75 | FJ | 39D756F100FJ6 |
| 90 | HE | 39D906F100HE6 |
| 110 | FL | 39D117F100FL6 |
| 120 | GJ | 39D127F100GJ6 |
| 130 | JE | 39D137F100JE6 |
| 150 | FP | 39D157F100FP6 |
| 180 | HJ | 39D187F100HJ6 |
| 190 | GL | 39D197F100GL6 |
| 250 | GP | 39D257F100GP6 |
| 260 | JJ | 39D267F100JJ6 |
| 280 | HL | 39D287F100HL6 |
| 370 | HP | 39D377F100HP6 |
| 390 | JL | 39D397F100JL6 |
| 460 | HS | 39D467F100HS6 |
| 520 | JP | 39D527F100JP6 |
| 650 | JS | 39D657F100JS6 |
| 780 | JT | 39D787F100JT6 |
| 150 WV_{DC} AT + 85 °C, SURGE = 175 V | | |
| 10 | EE | 39D106F150EE6 |
| 25 | EJ | 39D256F150EJ6 |
| 40 | EL | 39D406F150EL6 |
| 50 | FJ | 39D506F150FJ6 |
| 60 | HE | 39D606F150HE6 |
| 80 | FL | 39D806F150FL6 |
| 85 | GJ | 39D856F150GJ6 |
| 88 | JE | 39D886F150JE6 |
| 100 | FP | 39D107F150FP6 |
| 120 | GL | 39D127F150GL6 |
| 170 | GP | 39D177F150GP6 |
| 190 | HL | 39D197F150HL6 |
| 250 | HP | 39D257F150HP6 |
| 260 | JL | 39D267F150JL6 |
| 310 | HS | 39D317F150HS6 |
| 350 | JP | 39D357F150JP6 |
| 440 | JS | 39D447F150JS6 |
| 530 | JT | 39D537F150JT4 |



| ELECTRICAL DATA AND ORDERING INFORMATION | | |
|--|------------------|--------------------|
| CAPACITANCE (µF) | CASE CODE | PART NUMBER |
| 200 WV_{DC} AT + 85 °C, SURGE = 250 V | | |
| 9 | EE | 39D905F200EE6 |
| 15 | EJ | 39D156F200EJ6 |
| 25 | EL | 39D256F200EL6 |
| 30 | GE | 39D306F200GE6 |
| 35 | FJ | 39D356F200FJ6 |
| 40 | HE | 39D406F200HE6 |
| 55 | FL | 39D556F200FL6 |
| 60 | GJ | 39D606F200GJ6 |
| 75 | FP | 39D756F200FP6 |
| 80 | HJ | 39D806F200HJ6 |
| 90 | GL | 39D906F200GL6 |
| 120 | GP | 39D127F200GP6 |
| 130 | HL | 39D137F200HL6 |
| 170 | HP | 39D177F200HP6 |
| 180 | JL | 39D187F200JL6 |
| 220 | HS | 39D227F200HS6 |
| 250 | JP | 39D257F200JP6 |
| 310 | JS | 39D317F200JS6 |
| 370 | JT | 39D377F200JT6 |
| 250 WV_{DC} AT + 85 °C, SURGE = 300 V | | |
| 7 | EE | 39D705F250EE6 |
| 15 | EJ | 39D156F250EJ6 |
| 20 | EL | 39D206F250EL6 |
| 30 | FJ | 39D306F250FJ6 |
| 35 | HE | 39D356F250HE6 |
| 45 | FL | 39D456F250FL6 |
| 50 | JE | 39D506F250JE6 |
| 60 | FP | 39D606F250FP6 |
| 70 | GL | 39D706F250GL6 |
| 95 | GP | 39D956F250GP6 |
| 100 | HL | 39D107F250HL6 |
| 140 | HP | 39D147F250HP6 |
| 150 | JL | 39D157F250JL6 |
| 180 | HS | 39D187F250HS6 |
| 200 | JP | 39D207F250JP6 |
| 250 | JS | 39D257F250JS6 |
| 300 | JT | 39D307F250JT6 |
| 300 WV_{DC} AT + 85 °C, SURGE = 350 V | | |
| 5 | EE | 39D505F300EE6 |
| 10 | EJ | 39D106F300EJ6 |
| 15 | EL | 39D156F300EL6 |
| 20 | FJ | 39D206F300FJ6 |
| 25 | HE | 39D256F300HE6 |
| 30 | FL | 39D306F300FL6 |
| 40 | FP | 39D406F300FP6 |
| 50 | GL | 39D506F300GL6 |
| 65 | GP | 39D656F300GP6 |
| 75 | HL | 39D756F300HL6 |
| 100 | HP | 39D107F300HP6 |
| 120 | HS | 39D127F300HS6 |
| 130 | JP | 39D137F300JP6 |
| 170 | JS | 39D177F300JS6 |
| 200 | JT | 39D207F300JT6 |



| ELECTRICAL DATA AND ORDERING INFORMATION | | |
|--|------------------|--------------------|
| CAPACITANCE (μF) | CASE CODE | PART NUMBER |
| 350 WV_{DC} AT + 85 °C, SURGE = 400 V | | |
| 4 | EE | 39D405F350EE6 |
| 8 | EJ | 39D805F350EJ6 |
| 12 | EL | 39D126F350EL6 |
| 15 | FJ | 39D156F350FJ6 |
| 20 | FL | 39D206F350FL6 |
| 25 | GJ | 39D256F350GJ6 |
| 30 | FP | 39D306F350FP6 |
| 40 | GL | 39D406F350GL6 |
| 50 | GP | 39D506F350GP6 |
| 60 | HL | 39D606F350HL6 |
| 80 | HP | 39D806F350HP6 |
| 100 | HS | 39D107F350HS6 |
| 110 | JP | 39D117F350JP6 |
| 130 | JS | 39D137F350JS6 |
| 160 | JT | 39D167F350JT6 |
| 400 WV_{DC} AT + 85 °C, SURGE = 475 V | | |
| 2 | EE | 39D205F400EE6 |
| 5 | EJ | 39D505F400EJ6 |
| 10 | FJ | 39D106F400FJ6 |
| 15 | F | 39D156F400FL6 |
| 20 | F | 39D206F400FP6 |
| 25 | GL | 39D256F400GL6 |
| 35 | GP | 39D356F400GP6 |
| 40 | HL | 39D406F400HL6 |
| 55 | HP | 39D556F400HP6 |
| 65 | HS | 39D656F400HS6 |
| 75 | JP | 39D756F400JP6 |
| 90 | JS | 39D906F400JS6 |
| 110 | JT | 39D117F400JT6 |
| 450 WV_{DC} AT + 85 °C, SURGE = 525 V | | |
| 1 | EE | 39D105F450EE6 |
| 3 | EJ | 39D305F450EJ6 |
| 5 | EL | 39D505F450EL6 |
| 10 | FL | 39D106F450FL6 |
| 15 | FP | 39D156F450FP6 |
| 20 | GL | 39D206F450GL6 |
| 25 | GP | 39D256F450GP6 |
| 35 | HP | 39D356F450HP6 |
| 45 | HS | 39D456F450HS6 |
| 50 | JP | 39D506F450JP6 |
| 65 | JS | 39D656F450JS6 |
| 75 | JT | 39D756F450JT6 |



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