



### FEATURES

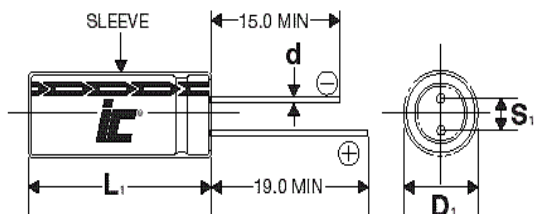
Very Fast Charge/Discharge – High Power Density – Lower ESR –  
RoHS Compliant

### APPLICATIONS

Battery Backup/Alternative – Pulse Power – Energy Harvesting – LED  
Displays – Mechanical Actuators – Audio Systems

|                                                                                                                                      |      |                                               |     |  |                                     |
|--------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------|-----|--|-------------------------------------|
| Operating Temperature Range                                                                                                          |      | -40°C to +65°C (-40 to +85°C @ 2.3V)          |     |  |                                     |
| Storage Temperature                                                                                                                  |      | -40°C to +70°C                                |     |  |                                     |
| Capacitance Tolerance @ 20°C                                                                                                         |      | +30%/-10% (Q tolerance)                       |     |  |                                     |
| Voltage                                                                                                                              | WVDC | 2.7                                           | 5.5 |  |                                     |
|                                                                                                                                      | SVDC | 2.85                                          | 5.8 |  |                                     |
| Life Time                                                                                                                            |      | 1000 hours with rated voltage applied at 65°C |     |  |                                     |
|                                                                                                                                      |      | Capacitance change                            |     |  | ≤30% of initially measured values   |
|                                                                                                                                      |      | ESR                                           |     |  | ≤200% of initially specified values |
|                                                                                                                                      |      | Leakage current                               |     |  | ≤100% specified maximum value       |
| Shelf Life                                                                                                                           |      | 1000 hours with no voltage applied at 60°C    |     |  |                                     |
|                                                                                                                                      |      | Capacitance change                            |     |  | ≤30% of initially measured values   |
|                                                                                                                                      |      | ESR                                           |     |  | ≤200% of initially specified values |
| Life Cycles<br>( 25°C) 1 cycle= Charge to WVDC for 20s, constant voltage charging for 10s, discharge to ½ WVDC for 20s, rest for 10s |      | 500,000 cycles                                |     |  |                                     |
|                                                                                                                                      |      | Capacitance change                            |     |  | <30% of initially measured values   |
|                                                                                                                                      |      | ESR change                                    |     |  | <200% of initially specified values |

D = 8 to 18mm

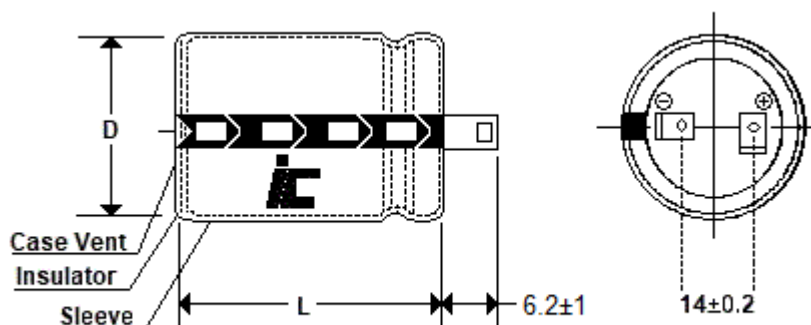
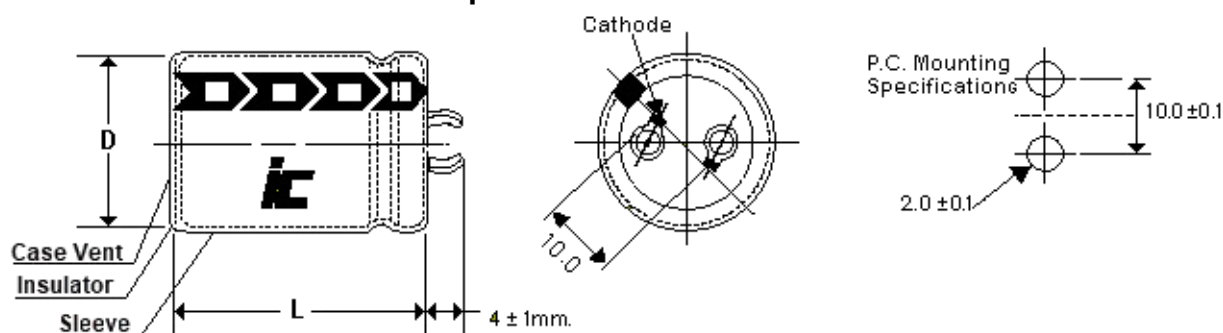


| Lead spacing VS. Case diameter |     |     |      |     |     |
|--------------------------------|-----|-----|------|-----|-----|
| D                              | 8   | 10  | 12.5 | 16  | 18  |
| S                              | 3.5 | 5.0 | 5.0  | 7.5 | 7.5 |
| d                              | 0.6 | 0.6 | 0.6  | 0.8 | 0.8 |
| α                              | 1.5 | 2.0 | 2.0  | 2.0 | 2.0 |

$L_1 = L + \alpha$  mm  
 $D_1 = D + 0.5$  mm  
 $S_1 = S \pm 0.5$  mm

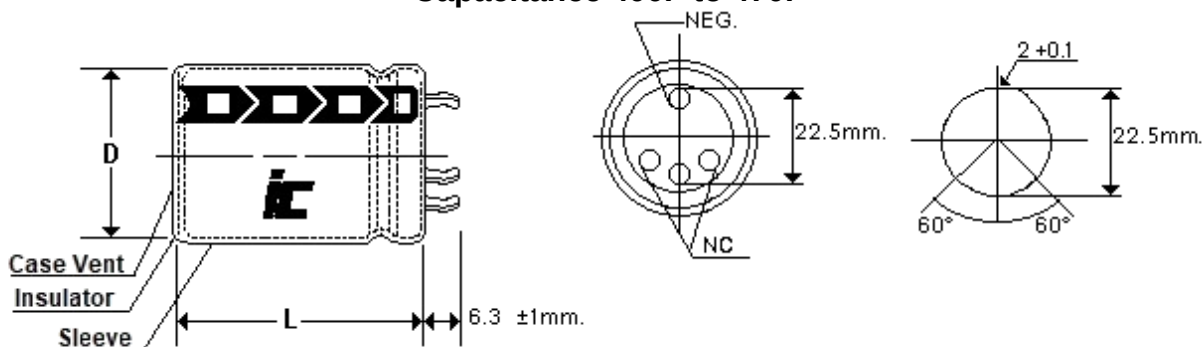


### Capacitance 100F to 350F

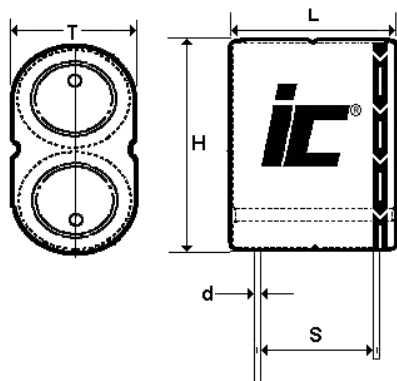


\*Lead style L available for 350F

### Capacitance 400F to 470F



### 5.5 Volt Parts



| Capacitance (F) | Dims (LxHxT) (mm) $\pm 1.0\text{mm}$ | Lead spacing (S) (mm) $\pm 0.5\text{mm}$ | Lead diameter (d) (mm) |
|-----------------|--------------------------------------|------------------------------------------|------------------------|
| 0.5             | 17x15x8.5                            | 12                                       | 0.6                    |
| 1               | 17x17x8.5                            | 12                                       | 0.6                    |
| 1.5             | 17x23x8.5                            | 12                                       | 0.6                    |
| 2.5             | 21x23x11                             | 15.5                                     | 0.6                    |
| 3.5             | 21x27x11                             | 15.5                                     | 0.6                    |
| 5               | 26x27x13                             | 18                                       | 0.6                    |

# DGH

High pulse power, extends  
battery life

| Capacitance (F) | WVDC | IC PART NUMBER | MAX Current (A) (1 Sec.) | Maximum Continuous Current (A) ( $\Delta T=15^{\circ}\text{C}$ ) | Short Circuit Current (A) | ESR AC 1 kHz (m $\Omega$ ) | DC ESR (m $\Omega$ ) 20°C | Max stored energy (mWh) | LC (mA), (72 hrs) | Energy Density (Wh/kg) | Energy Volumetric Density (Wh/l) | Power Density (kW/kg) | Power Volumetric Density (kW/l) |
|-----------------|------|----------------|--------------------------|------------------------------------------------------------------|---------------------------|----------------------------|---------------------------|-------------------------|-------------------|------------------------|----------------------------------|-----------------------|---------------------------------|
| 0.5             | 5.5  | DGH504Q5R5     | 0.982                    | 0.6                                                              | 6.875                     | 400                        | 800                       | 2.101                   | 0.008             | 0.955                  | 0.855                            | 2.063                 | 1.847                           |
| 1.0             | 2.7  | DGH105Q2R7     | 0.964                    | 0.6                                                              | 6.75                      | 200                        | 400                       | 1.013                   | 0.008             | 0.92                   | 1.44                             | 1.988                 | 3.109                           |
| 1.0             | 5.5  | DGH105Q5R5     | 1.833                    | 0.7                                                              | 11                        | 260                        | 500                       | 4.201                   | 0.01              | 1.681                  | 1.71                             | 2.904                 | 2.955                           |
| 1.5             | 5.5  | DGH155Q5R5     | 2.845                    | 1.2                                                              | 18.333                    | 160                        | 300                       | 6.302                   | 0.012             | 2.101                  | 1.896                            | 4.033                 | 3.641                           |
| 2.0             | 2.7  | DGH205Q2R7     | 1.8                      | 0.7                                                              | 10.8                      | 130                        | 250                       | 2.025                   | 0.01              | 1.688                  | 2.879                            | 2.916                 | 4.975                           |
| 2.5             | 5.5  | DGH255Q5R5     | 4.167                    | 1.3                                                              | 21.154                    | 140                        | 260                       | 10.503                  | 0.016             | 2.02                   | 1.977                            | 2.685                 | 2.628                           |
| 3.0             | 2.7  | DGH305Q2R7     | 2.792                    | 1.2                                                              | 18                        | 80                         | 150                       | 3.038                   | 0.012             | 2.17                   | 3.023                            | 4.166                 | 5.804                           |
| 3.3             | 2.7  | DGH335Q2R7     | 2.98                     | 1.2                                                              | 18                        | 80                         | 150                       | 3.341                   | 0.014             | 2.228                  | 3.325                            | 3.888                 | 5.804                           |
| 3.5             | 5.5  | DGH355Q5R5     | 6.17                     | 1.7                                                              | 34.375                    | 110                        | 160                       | 14.705                  | 0.02              | 2.451                  | 2.358                            | 3.781                 | 3.638                           |
| 5.0             | 2.7  | DGH505Q2R7     | 4.091                    | 1.3                                                              | 20.769                    | 70                         | 130                       | 5.063                   | 0.016             | 2.531                  | 3.225                            | 3.365                 | 4.286                           |
| 5.0             | 5.5  | DGH505Q5R5     | 8.594                    | 2.1                                                              | 45.833                    | 80                         | 120                       | 21.007                  | 0.03              | 2.531                  | 2.302                            | 3.645                 | 3.315                           |
| 6.0             | 2.7  | DGH605Q2R7     | 4.5                      | 2.3                                                              | 20.7                      | 70                         | 130                       | 6.08                    | 0.016             | 2.89                   | 3.86                             | 3.2                   | 4.3                             |
| 7.0             | 2.7  | DGH705Q2R7     | 6.058                    | 1.7                                                              | 33.750                    | 55                         | 80                        | 7.088                   | 0.02              | 2.835                  | 3.611                            | 4.374                 | 5.572                           |
| 10.0            | 2.7  | DGH106Q2R7     | 8.438                    | 2.4                                                              | 45                        | 40                         | 60                        | 10.125                  | 0.03              | 3.894                  | 5.159                            | 5.608                 | 7.429                           |
| 10.0            | 2.7  | DGH106Q2R7B    | 8.438                    | 2.1                                                              | 45                        | 40                         | 60                        | 10.125                  | 0.03              | 2.978                  | 4.299                            | 4.288                 | 6.191                           |
| 10.0            | 2.7  | DGH106Q2R7C    | 8.4                      | 3.4                                                              | 45.0                      | 40                         | 60                        | 10.13                   | 0.03              | 3.38                   | 5.16                             | 4.86                  | 7.4                             |
| 15.0            | 2.7  | DGH156Q2R7     | 11.571                   | 2.4                                                              | 54                        | 30                         | 50                        | 15.188                  | 0.045             | 3.375                  | 4.127                            | 3.888                 | 4.755                           |
| 20.0            | 2.7  | DGH206Q2R7     | 15                       | 2.6                                                              | 67.5                      | 30                         | 40                        | 20.25                   | 0.06              | 3.11                   | 4.02                             | 3.36                  | 4.3                             |
| 25.0            | 2.7  | DGH256Q2R7     | 18                       | 3.1                                                              | 77.143                    | 25                         | 35                        | 25.313                  | 0.08              | 2.978                  | 5.038                            | 2.941                 | 4.975                           |
| 30.0            | 2.7  | DGH306Q2R7     | 21.3                     | 4.0                                                              | 90                        | 22                         | 30                        | 30.38                   | 0.1               | 3.79                   | 5.03                             | 3.64                  | 4.8                             |
| 50.0            | 2.7  | DGH506Q2R7     | 32.143                   | 5.2                                                              | 122.727                   | 15                         | 22                        | 50.625                  | 0.14              | 3.616                  | 4.976                            | 2.84                  | 3.909                           |
| 70.0            | 2.7  | DGH706Q2R7     | 39.375                   | 5.8                                                              | 135                       | 14                         | 20                        | 70.875                  | 0.16              | 3.938                  | 5.573                            | 2.43                  | 3.439                           |
| 100.0           | 2.7  | DGH107Q2R7     | 61.364                   | 8.3                                                              | 225                       | 8                          | 12                        | 101.25                  | 0.3               | 4.821                  | 5.922                            | 3.471                 | 4.264                           |
| 200.0           | 2.7  | DGH207Q2R7     | 90                       | 10                                                               | 270                       | 6                          | 10                        | 202.5                   | 0.7               | 5.192                  | 5.732                            | 2.243                 | 2.476                           |
| 350.0           | 2.7  | DGH357Q2R7     | 212.36                   | 18.9                                                             | 771.429                   | 3                          | 3.5                       | 354.375                 | 1                 | 5.452                  | 6.134                            | 3.845                 | 4.329                           |
| 350.0           | 2.7  | DGH357Q2R7L    | 212.36                   | 18.9                                                             | 771.4                     | 3                          | 3.5                       | 354.4                   | 1                 | 5.452                  | 6.134                            | 3.845                 | 4.329                           |
| 400.0           | 2.7  | DGH407Q2R7     | 236.84                   | 18.9                                                             | 843.750                   | 2.8                        | 3.2                       | 405                     | 1                 | 5.956                  | 7.016                            | 4.02                  | 4.736                           |
| 470.0           | 2.7  | DGH477Q2R7     | 239.89                   | 18.9                                                             | 771.429                   | 3                          | 3.5                       | 475.875                 | 1.3               | 6.609                  | 8.244                            | 3.471                 | 4.33                            |

# DGH

High pulse power, extends  
battery life

| Capacitance<br>(F) | WVDC | IC PART NUMBER | Weight<br>(grams) | Volume<br>(mL) | Dims<br>DxL<br>LxHxT<br>(mm) | Lead<br>Spacing<br>S<br>(mm) | Lead<br>Diameter<br>d<br>(mm) |
|--------------------|------|----------------|-------------------|----------------|------------------------------|------------------------------|-------------------------------|
| 0.5                | 5.5  | DGH504Q5R5     | 2.2               | 2.457          | 17x15x8.5                    | 12                           | 0.6                           |
| 1.0                | 2.7  | DGH105Q2R7     | 1.1               | 0.703          | 8x13                         | 3.5                          | 0.6                           |
| 1.0                | 5.5  | DGH105Q5R5     | 2.5               | 2.457          | 17x17x8.5                    | 12                           | 0.6                           |
| 1.5                | 5.5  | DGH155Q5R5     | 3                 | 3.324          | 17x23x8.5                    | 12                           | 0.6                           |
| 2.0                | 2.7  | DGH205Q2R7     | 1.2               | 0.703          | 8x14                         | 3.5                          | 0.6                           |
| 2.5                | 5.5  | DGH255Q5R5     | 5.2               | 5.313          | 21x23x11                     | 15.5                         | 0.6                           |
| 3.0                | 2.7  | DGH305Q2R7     | 1.4               | 1.005          | 8x20                         | 3.5                          | 0.6                           |
| 3.3                | 2.7  | DGH335Q2R7     | 1.5               | 1.005          | 8x20                         | 3.5                          | 0.6                           |
| 3.5                | 5.5  | DGH355Q5R5     | 6                 | 6.237          | 21x27x11                     | 15.5                         | 0.6                           |
| 5.0                | 2.7  | DGH505Q2R7     | 2                 | 1.57           | 10x20                        | 5                            | 0.6                           |
| 5.0                | 5.5  | DGH505Q5R5     | 8.3               | 9.126          | 26x27x13                     | 18                           | 0.6                           |
| 6.0                | 2.7  | DGH605Q2R7     | 2.1               | 1.57           | 10x20                        | 5                            | 0.6                           |
| 7.0                | 2.7  | DGH705Q2R7     | 2.5               | 1.963          | 10x25                        | 5                            | 0.6                           |
| 10.0               | 2.7  | DGH106Q2R7     | 2.6               | 1.963          | 10x30                        | 5                            | 0.6                           |
| 10.0               | 2.7  | DGH106Q2R7B    | 3.4               | 2.355          | 12.5x25                      | 5                            | 0.6                           |
| 10.0               | 2.7  | DGH106Q2R7C    | 2.3               | 1.96           | 10x25                        | 5                            | 0.6                           |
| 15.0               | 2.7  | DGH156Q2R7     | 4.5               | 3.68           | 12.5x30                      | 5                            | 0.6                           |
| 20.0               | 2.7  | DGH206Q2R7     | 7                 | 5.03           | 16x25                        | 7.5                          | 0.6                           |
| 25.0               | 2.7  | DGH256Q2R7     | 8.5               | 5.024          | 16x25                        | 7.5                          | 0.8                           |
| 30.0               | 2.7  | DGH306Q2R7     | 9.7               | 6.03           | 16x30                        | 7.5                          | 0.6                           |
| 50.0               | 2.7  | DGH506Q2R7     | 14                | 10.174         | 18x40                        | 7.5                          | 0.8                           |
| 70.0               | 2.7  | DGH706Q2R7     | 18                | 12.717         | 18x50                        | 7.5                          | 0.8                           |
| 100.0              | 2.7  | DGH107Q2R7     | 21                | 17.097         | 22x45                        | 10                           | 0                             |
| 200.0              | 2.7  | DGH207Q2R7     | 39                | 35.325         | 30x50                        | 10                           | 0                             |
| 350.0              | 2.7  | DGH357Q2R7     | 65                | 57.727         | 35x60                        | 10                           | 0                             |
| 350.0              | 2.7  | DGH357Q2R7L    | 65                | 57.727         | 35x60                        | 18.4                         | 0                             |
| 400.0              | 2.7  | DGH407Q2R7     | 68                | 57.727         | 35x60                        | 22.5                         | 0                             |
| 470.0              | 2.7  | DGH477Q2R7     | 72                | 57.727         | 35x60                        | 22.5                         | 0                             |

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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