

# G Series

## Capacitor Discharge & Symmetry



### FEATURES

- High Power Dissipation up to 13W @25°C
- Specially Designed to meet Repetitive Pulse Loading
- Corrosion Resistant Terminals for long life
- Superior Vibration Resistance
- IEC 115-1 Reference Standard

### SERIES SPECIFICATIONS

| Series | Wattage @25°C | Wattage @70°C | Limiting Voltage | Critical Value | Ohmic Range |
|--------|---------------|---------------|------------------|----------------|-------------|
| GW10   | 10            | 8.5           | 685              | 47KΩ           | 1Ω-82K      |
| GW13   | 13            | 11            | 940              | 68KΩ           | 1Ω-120K     |

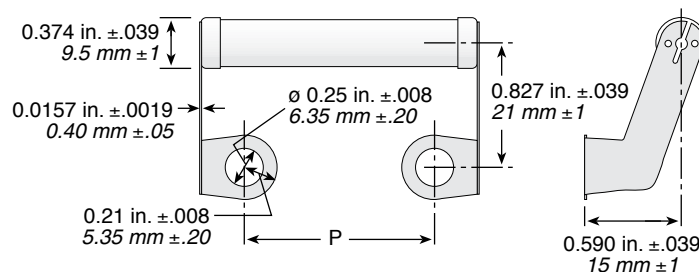
### CHARACTERISTICS

|                          |                         |
|--------------------------|-------------------------|
| <b>Temperature Range</b> | -55°C to 200°C          |
| <b>Terminal Strength</b> | >25N                    |
| <b>Derating</b>          | 25°C to 350°C, Linearly |
| <b>TCR</b>               | ±100 ppm/°C             |
| <b>Tolerance</b>         | 1%, ±2%, ±5%, ±10%      |

### PERFORMANCE DATA

|                                       |                                                               |                  |
|---------------------------------------|---------------------------------------------------------------|------------------|
| <b>Endurance at Rated Temperature</b> | Full Rated Power for 1000hrs, (1.5hrs ON, 0.5hrs OFF) at 25°C | ΔR < 5% + 0R05   |
| <b>Short Term Overload</b>            | 10 x Rated Power for 5 secs, IEC115-1, Clause 4.1.3           | ΔR < 2% + 0R05   |
| <b>Damp Heat</b>                      | 90-95% RH, 40°C, 56 Days,                                     | ΔR < 5% + 0R05   |
| <b>Steady State</b>                   | IEC 115-1, Clause 4.17.3                                      |                  |
| <b>Climatic Sequence</b>              | As per IEC 115-1, Clause 4.23                                 | ΔR < 5% + 0R05   |
| <b>Solderability</b>                  | Not Applicable-Resistor is Designed for Screw Mounting Only   |                  |
| <b>Terminal Strength</b>              | 25 N Pull Test for 10 Seconds, IEC 115-1, Clause 4.16         | ΔR < 0.5% + 0R05 |

### DIMENSIONS



| Series | Length P<br>(in. ±.039 / mm±1) |
|--------|--------------------------------|
| GW10   | 0.866 / 22.0                   |
| GW13   | 1.252 / 31.8                   |

(continued)

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### COMPATIBILITY

#### BHC

| GW10 Series | Case Sizes | GW13 Series | Case Sizes                 |
|-------------|------------|-------------|----------------------------|
| ALS30/31    | KE, KF     | ALS30/31    | ND, NF, NP, NT, RD, RH, RP |

#### Cornell Dubilier

| GW10 Series | Case Sizes                     | GW13 Series | Case Sizes                                                     |
|-------------|--------------------------------|-------------|----------------------------------------------------------------|
| 3186        | EA, EB, EC, ED, EE, EF, EG, EH | 3186        | GC, GD, GE, GF, GG, GH, GJ, DN                                 |
| 3188        | EA, EB, EC, ED, EE, EF, EG, EH | 3188        | GC, GD, GE, GF, GG, GH, GJ, DN                                 |
| 520C        | BA, BH, BB, BJ, BC, BD, BE, BF | 520C        | DB, DJ, DC, DD, DE, DF, DP, DN, DG, FC, FD, FE, FF, FP, FN, FG |
| DCMC        | BA, BH, BB, BJ, BC, BD, BE, BF | DCMC        | DB, DJ, DC, DD, DE, DF, DP, DN, DG, FC, FD, FE, FF, FP, FN, FG |
| FG          | All                            |             |                                                                |
| OTB         | All                            |             |                                                                |
| MPF         | BA, BH, BB, BJ, BC, BD, BE, BF |             |                                                                |
| PF          | A                              |             |                                                                |
| SCR         | All                            |             |                                                                |
| SF          | A                              |             |                                                                |
| T           | A                              |             |                                                                |

#### Epcos

| GW10 Series | Case Sizes | GW13 Series | Case Sizes |
|-------------|------------|-------------|------------|
| B41456      | 51.6       | B41456      | 76.9       |
| B41458      | 51.6       | B41458      | 76.9       |
| B43456      | 51.6       | B43456      | 76.9, 91   |
| B43458      | 51.6       | B43458      | 76.9, 91   |

#### ILL Capacitor

| GW10 Series | Case Sizes | GW13 Series | Case Sizes |
|-------------|------------|-------------|------------|
| LKP         | 51         | LKP         | 77, 90     |
| LRP         | 51         |             |            |

#### Nichicon UK

| GW10 Series | Case Sizes | GW13 Series | Case Sizes |
|-------------|------------|-------------|------------|
| NR          | 51         | NR          | 76.2, 90   |
| NT          | 51         | NT          | 76.2, 90   |
| NW          | 51         | NW          | 76.2, 90   |
| NX          | 51         | NX          | 76.2, 90   |
| QR          | 51         | QR          | 76.2, 90   |

#### Panasonic

| GW10 Series | Case Sizes                         | GW13 Series | Case Sizes                 |
|-------------|------------------------------------|-------------|----------------------------|
| G           | FB, FC, FE, FG, FH, FK, FL, FN, FP | G           | HG, HH, HK, HL, HN, HP, HW |

#### United Chemi-Con

| GW10 Series | Case Sizes | GW13 Series | Case Sizes |
|-------------|------------|-------------|------------|
| KMH         | 50         | LXA         | 76, 89     |
| LXA         | 50         | LXR         | 76, 89     |
| RWE         | 50         | KMH         | 76, 89     |
| RWF         | 50         | RWE         | 76, 89     |
| RWY         | 50         | RWF         | 76, 89     |
| SME         | 50         | RWL         | 76, 89     |
|             |            | RWY         | 76, 89     |
|             |            | SME         | 76, 89     |
|             |            | UTOR        | 76         |

#### Vishay

| GW10 Series     | Case Sizes                         | GW13 Series     | Case Sizes             |
|-----------------|------------------------------------|-----------------|------------------------|
| 36D, 36DE, 36DX | BY, BA, BM, BB, BL, BC, BD, BE, BF | 36D, 36DE, 36DX | DB, DJ, DC, DD, DE, DF |

### ORDERING INFORMATION

G Series — **GW10J5K00E** — E = RoHS compliant

| Component Modifier | Wattage              | Tolerance                             | Resistance Value         | Examples:                                                            |
|--------------------|----------------------|---------------------------------------|--------------------------|----------------------------------------------------------------------|
| W = wirewound      | 10 watts<br>13 watts | K = 10%<br>J = 5%<br>G = 2%<br>F = 1% | R = Decimal<br>K = 1,000 | 1K00 = 1,000Ω<br>10K0 = 10,000Ω<br>82K0 = 82,000Ω<br>120K = 120,000Ω |

#### Standard part numbers

| Ohms | 10 watt    | 13 watt    |
|------|------------|------------|
| 1K   | GW10J1K00E | GW13J1K00E |
| 2.5K | GW10J2K50E | GW13J2K50E |
| 5K   | GW10J5K00E | GW13J5K00E |
| 7.5K | GW10J7K50E | GW13J7K50E |
| 10K  | GW10J10K0E | GW13J10K0E |
| 15K  | GW10J15K0E | GW13J15K0E |
| 20K  | GW10J20K0E | GW13J20K0E |
| 25K  | GW10J25K0E | GW13J25K0E |
| 40K  | GW10J40K0E | GW13J40K0E |
| 50K  | GW10J50K0E | GW13J50K0E |
| 75K  | GW10J75K0E | GW13J75K0E |