

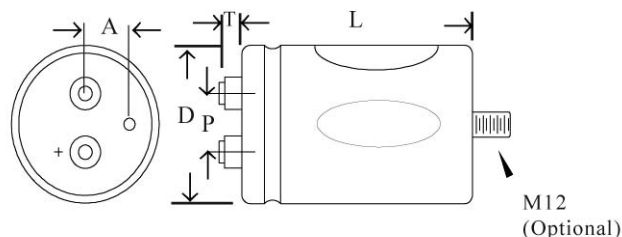
# Type 3191 Aluminum Electrolytic, Screw Terminals, Switching and Audio Output

## Screw Terminal Capacitors for Power Output Filtering



The low ESR of Type 3191 capacitors makes them a great choice for output filtering in switching and audio power supplies. It's available with the capacitor element potted in place for lowest cost or secured by rill, spoon shaped dimples in the side of the can. Rilled construction offers high vibration and shock withstanding and excellent heat transfer for higher ripple current.

### Outline Drawing



### Highlights

- Stud mount available
- High current application
- Industrial applications
- Smoothing and filtering
- Audio power supplies

### Specifications

|                                   |                                 |
|-----------------------------------|---------------------------------|
| <b>Operating Temperature:</b>     | −40 to + 85 °C                  |
| <b>Rated Voltage:</b>             | 7.5 Vdc to 55 Vdc               |
| <b>Capacitance Range:</b>         | 2700 µF to 150000 µF            |
| <b>Capacitance Tolerance:</b>     | −10 to + 30%; −10 to +50%; ±20% |
| <b>Ripple Current Multipliers</b> |                                 |

#### Ambient Temperature

| Temperature               | 45 °C | 55 °C | 65 °C | 75 °C | 85 °C |
|---------------------------|-------|-------|-------|-------|-------|
| I <sub>R</sub> Multiplier | 2.24  | 2.00  | 1.73  | 1.41  | 1.00  |

#### Frequency

| Frequency                 | 60 Hz | 120 Hz | 300 Hz | 1000 Hz | ≥10 KHz |
|---------------------------|-------|--------|--------|---------|---------|
| I <sub>R</sub> Multiplier | 0.90  | 1.00   | 1.05   | 1.10    | 1.15    |

**Life Test:** Endurance, 1500 h at rated voltage and 85 °C  
Δ Capacitance: ±10%  
ESR ≤ 200% of limit  
DCL ≤ 100% of limit

**Shelf Life:** Storage, 500 h at 85 °C  
Δ Capacitance: ±10%  
ESR ≤ 175% of limit  
DCL ≤ 200% of limit

**Vibration:** 10 to 500 Hz, 0.75 mm or 10 g\* if less,  
3 directions, 2 h ea  
Δ Capacitance: ±5%  
no visible damage or leakage  
\*15 g if rilled construction



Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

# Type 3191 Aluminum Electrolytic, Screw Terminals, Switching and Audio Output

## Case Dimensions, Uninsulated Bare Can

| Case Code | Diameter (D)    |            | Length (L)      |             | Pitch (P)       |             | Plug (A)   |        | Typical     |            | Optional Bracket Part No. |
|-----------|-----------------|------------|-----------------|-------------|-----------------|-------------|------------|--------|-------------|------------|---------------------------|
|           | ±0.031 (Inches) | ±0.79 (mm) | ±0.062 (Inches) | ±1.157 (mm) | ±0.014 (Inches) | ±0.356 (mm) | A (Inches) | A (mm) | Weight (oz) | Weight (g) |                           |
| BA        | 1.375           | 34.9       | 2.125           | 54.0        | 0.500           | 12.7        | 0.390      | 9.9    | 2.53        | 72         | 115058-06                 |
| BB        | 1.375           | 34.9       | 2.625           | 66.7        | 0.500           | 12.7        | 0.390      | 9.9    | 3.17        | 90         | 115058-06                 |
| BC        | 1.375           | 34.9       | 3.125           | 79.4        | 0.500           | 12.7        | 0.390      | 9.9    | 3.70        | 105        | 115058-06                 |
| BD        | 1.375           | 34.9       | 3.625           | 92.1        | 0.500           | 12.7        | 0.390      | 9.9    | 4.22        | 120        | 115058-06                 |
| BE        | 1.375           | 34.9       | 4.125           | 104.8       | 0.500           | 12.7        | 0.390      | 9.9    | 4.75        | 135        | 115058-06                 |
| BF        | 1.375           | 34.9       | 4.625           | 117.5       | 0.500           | 12.7        | 0.390      | 9.9    | 5.98        | 170        | 115058-06                 |
| BG        | 1.375           | 34.9       | 5.125           | 130.2       | 0.500           | 12.7        | 0.390      | 9.9    | 7.74        | 220        | 115058-06                 |
| BH        | 1.375           | 34.9       | 5.625           | 142.9       | 0.500           | 12.7        | 0.390      | 9.9    | 9.50        | 270        | 115058-06                 |
| DA        | 1.75            | 44.5       | 2.125           | 54.0        | 0.750           | 19.1        | 0.453      | 11.5   | 5.63        | 160        | 115058-15                 |
| DB        | 1.75            | 44.5       | 2.625           | 66.7        | 0.750           | 19.1        | 0.453      | 11.5   | 6.16        | 175        | 115058-15                 |
| DC        | 1.75            | 44.5       | 3.125           | 79.4        | 0.750           | 19.1        | 0.453      | 11.5   | 6.34        | 180        | 115058-15                 |
| DD        | 1.75            | 44.5       | 3.625           | 92.1        | 0.750           | 19.1        | 0.453      | 11.5   | 7.22        | 205        | 115058-15                 |
| DE        | 1.75            | 44.5       | 4.125           | 104.8       | 0.750           | 19.1        | 0.453      | 11.5   | 7.74        | 220        | 115058-15                 |
| DF        | 1.75            | 44.5       | 4.625           | 117.5       | 0.750           | 19.1        | 0.453      | 11.5   | 8.27        | 235        | 115058-15                 |
| DG        | 1.75            | 44.5       | 5.125           | 130.2       | 0.750           | 19.1        | 0.453      | 11.5   | 8.80        | 250        | 115058-15                 |
| DH        | 1.75            | 44.5       | 5.625           | 142.9       | 0.750           | 19.1        | 0.453      | 11.5   | 9.50        | 270        | 115058-15                 |
| EA        | 2               | 50.8       | 2.125           | 54.0        | 0.875           | 22.2        | 0.500      | 12.7   | 5.98        | 170        | 115058-09                 |
| EB        | 2               | 50.8       | 2.625           | 66.7        | 0.875           | 22.2        | 0.500      | 12.7   | 6.34        | 180        | 115058-09                 |
| EC        | 2               | 50.8       | 3.125           | 79.4        | 0.875           | 22.2        | 0.500      | 12.7   | 6.69        | 190        | 115058-09                 |
| ED        | 2               | 50.8       | 3.625           | 92.1        | 0.875           | 22.2        | 0.500      | 12.7   | 7.74        | 220        | 115058-09                 |
| EE        | 2               | 50.8       | 4.125           | 104.8       | 0.875           | 22.2        | 0.500      | 12.7   | 8.98        | 255        | 115058-09                 |
| EF        | 2               | 50.8       | 4.625           | 117.5       | 0.875           | 22.2        | 0.500      | 12.7   | 10.21       | 290        | 115058-09                 |
| EG        | 2               | 50.8       | 5.125           | 130.2       | 0.875           | 22.2        | 0.500      | 12.7   | 11.26       | 320        | 115058-09                 |
| EH        | 2               | 50.8       | 5.625           | 142.9       | 0.875           | 22.2        | 0.500      | 12.7   | 8.80        | 250        | 115058-09                 |
| FB        | 2.5             | 63.5       | 2.625           | 66.7        | 1.125           | 28.6        | 0.625      | 15.9   | 10.56       | 300        | 115058-14                 |
| FC        | 2.5             | 63.5       | 3.125           | 79.4        | 1.125           | 28.6        | 0.625      | 15.9   | 13.02       | 370        | 115058-14                 |
| FD        | 2.5             | 63.5       | 3.625           | 92.1        | 1.125           | 28.6        | 0.625      | 15.9   | 14.08       | 400        | 115058-14                 |
| FE        | 2.5             | 63.5       | 4.125           | 104.8       | 1.125           | 28.6        | 0.625      | 15.9   | 15.66       | 445        | 115058-14                 |
| FF        | 2.5             | 63.5       | 4.625           | 117.5       | 1.125           | 28.6        | 0.625      | 15.9   | 21.12       | 600        | 115058-14                 |
| FG        | 2.5             | 63.5       | 5.125           | 130.2       | 1.125           | 28.6        | 0.625      | 15.9   | 22.88       | 650        | 115058-14                 |
| FH        | 2.5             | 63.5       | 5.625           | 142.9       | 1.125           | 28.6        | 0.625      | 15.9   | 21.12       | 600        | 115058-14                 |
| GC        | 3               | 76.2       | 3.125           | 79.4        | 1.250           | 31.8        | 0.750      | 19.1   | 18.30       | 520        | 115058-11                 |
| GD        | 3               | 76.2       | 3.625           | 92.1        | 1.250           | 31.8        | 0.750      | 19.1   | 20.06       | 570        | 115058-11                 |
| GE        | 3               | 76.2       | 4.125           | 104.8       | 1.250           | 31.8        | 0.750      | 19.1   | 21.12       | 600        | 115058-11                 |
| GF        | 3               | 76.2       | 4.625           | 117.5       | 1.250           | 31.8        | 0.750      | 19.1   | 25.34       | 720        | 115058-11                 |
| GG        | 3               | 76.2       | 5.125           | 130.2       | 1.250           | 31.8        | 0.750      | 19.1   | 29.92       | 850        | 115058-11                 |
| GH        | 3               | 76.2       | 5.625           | 142.9       | 1.250           | 31.8        | 0.750      | 19.1   | 34.14       | 970        | 115058-11                 |
| GJ        | 3               | 76.2       | 5.825           | 148.0       | 1.250           | 31.8        | 0.750      | 19.1   | 36.96       | 1050       | 115058-11                 |
| GN        | 3               | 76.2       | 8.625           | 219.1       | 1.250           | 31.8        | 0.750      | 19.1   | 51.39       | 1460       | 115058-11                 |

# Type 3191 Aluminum Electrolytic, Screw Terminals, Switching and Audio Output

## Insulation Dimensions

| Code | Clamp Bracket | Insulation Type | Dimension Adders     |        |        |
|------|---------------|-----------------|----------------------|--------|--------|
|      |               |                 | D                    | L      | H      |
|      |               |                 | Dimensions in Inches |        |        |
| P    | no            | 0.008" PVC      | +0.02                | +0.032 | +0.024 |
| H    | no            | 0.012" PVC      | +0.03                | +0.062 | +0.045 |
| N    | no            | none            | —                    | —      | —      |
| R    | yes           | 0.008" PVC      | +0.02                | +0.032 | +0.024 |
| J    | yes           | 0.012" PVC      | +0.03                | +0.062 | +0.045 |
| X    | yes           | none            | —                    | —      | —      |

## Terminal Dimensions

| Terminal Style     | For Case Diameters | Code | Post Diameter in mm | H max in mm | Thread | min Full Thread in mm | Torque in-lb N-m |
|--------------------|--------------------|------|---------------------|-------------|--------|-----------------------|------------------|
| Low Post           | 1½ to 3            | B    | 0.314 8.0           | 0.094 2.4   | 10-32  | 0.218 5.5             | 25 2.82          |
| High Post          | 1½ to 3            | A    | 0.314 8.0           | 0.281 7.1   | 10-32  | 0.375 9.5             | 25 2.82          |
| High Current, Low  | 2½ & 3             | D    | 0.684 17.4          | 0.125 3.2   | ¼-28   | 0.344 8.7             | 60 6.78          |
| High Current, High | 2½ & 3             | K    | 0.684 17.4          | 0.281 7.1   | ¼-28   | 0.469 11.9            | 60 6.78          |
| M5 Post, Small     | 1½ to 2            | M    | 0.314 8.0           | 0.281 7.1   | M5     | 0.375 9.5             | 25 2.82          |
| M6 Low Post        | 3                  | J    | 0.684 17.4          | 0.125 3.2   | M6     | 0.344 8.7             | 60 6.78          |

[Click here to see Hardware & Mounting Options](#)

## Part Numbering System

| 3191 | BA        | 153         | M         | 7R5     | B        | P          | A1            |
|------|-----------|-------------|-----------|---------|----------|------------|---------------|
| Type | Case Code | Capacitance | Tolerance | Voltage | Terminal | Insulation | Construction* |

|      |      |                |              |               |                            |                                |                      |
|------|------|----------------|--------------|---------------|----------------------------|--------------------------------|----------------------|
| 3191 | Case | 153 = 15000 µF | M = ±20%     | 7R5 = 7.5 Vdc | A = high post              | P = 0.008" PVC                 | A1 = potted          |
|      | Code | 223 = 22000 µF | S = -10 +30% | 020 = 20 Vdc  | B = low post               | H = 0.012" PVC                 | R1 = rilled          |
|      |      | 272 = 2700 µF  | T = -10 +50% |               | D = high current low post  | N = none with mounting bracket | S1 = stud & potted   |
|      |      |                | U = -10 +75% |               | K = high current high post | R = 0.008" PVC                 | T1 - stud & rilled** |
|      |      |                |              |               | M = M5 high post           | J = 0.012" PVC                 |                      |
|      |      |                |              |               | J = M6 low post            | X = None                       |                      |

\* Construction code is also a sequence number, e.g., A1, A2, — A9,

B1, B2, —, for customer specifications. Sequence number 1 in A1, R1

S1 and T1 denotes the standard catalog capacitor with no special requirements.

\*\* Mounting stud not available for 1.375" diameter cases, case codes BA, BC and BE

## Ratings

| Cap (µF)                | Type 3191 Catalog Part Number | ESR max 120 Hz 25 °C (mΩ) | Ripple max 120 Hz 85 °C pitch (A) rilled(A) | Case Size DxDL (in) | Cap (µF)              | Type 3191 Catalog Part Number | ESR max 120 Hz 25 °C (mΩ) | Ripple max 120 Hz 85 °C pitch (A) rilled(A) | Case Size DxDL (in) |
|-------------------------|-------------------------------|---------------------------|---------------------------------------------|---------------------|-----------------------|-------------------------------|---------------------------|---------------------------------------------|---------------------|
| 7.5 Vdc (9.8 Vdc Surge) |                               |                           |                                             |                     | 10 Vdc (13 Vdc Surge) |                               |                           |                                             |                     |
| 15000                   | 3191BA153M7R5BPA1             | 15.8                      | 8.2 9.4                                     | 1.375x2.125         | 15000                 | 3191BA153M010BPA1             | 15.6                      | 8.3 9.5                                     | 1.375x2.125         |
| 18000                   | 3191BB183M7R5BPA1             | 13.9                      | 9.2 10.4                                    | 1.375x2.625         | 18000                 | 3191BB183M010BPA1             | 13.6                      | 9.6 10.9                                    | 1.375x2.625         |
| 22000                   | 3191BC223M7R5BPA1             | 11.8                      | 10.3 11.5                                   | 1.375x3.125         | 22000                 | 3191BC223M010BPA1             | 11.1                      | 10.9 12.2                                   | 1.375x3.125         |
| 27000                   | 3191BC273M7R5BPA1             | 10.8                      | 11.3 12.7                                   | 1.375x3.125         | 27000                 | 3191BD273M010BPA1             | 10.1                      | 12.5 13.9                                   | 1.375x3.625         |
| 33000                   | 3191BD333M7R5BPA1             | 9.4                       | 12.8 14.2                                   | 1.375x3.625         | 33000                 | 3191BE333M010BPA1             | 9.1                       | 14.0 15.5                                   | 1.375x4.125         |
| 39000                   | 3191BE393M7R5BPA1             | 8.6                       | 14.0 15.5                                   | 1.375x4.125         | 33000                 | 3191EA333M010BPA1             | 9.1                       | 13.6 15.5                                   | 2.00x2.125          |
| 47000                   | 3191BG473M7R5BPA1             | 7.3                       | 16.0 17.7                                   | 1.375x5.125         | 39000                 | 3191BE393M010BPA1             | 8.6                       | 14.1 15.7                                   | 1.375x4.125         |
| 47000                   | 3191EA473M7R5BPA1             | 7.3                       | 15.5 17.7                                   | 2.00x2.125          | 39000                 | 3191EB393M010BPA1             | 8.6                       | 14.0 15.7                                   | 2.00x2.625          |
| 56000                   | 3191BH563M7R5BPA1             | 7.0                       | 18.1 19.5                                   | 1.375x5.625         | 47000                 | 3191BG473M010BPA1             | 7.4                       | 16.9 18.1                                   | 1.375x5.125         |
| 56000                   | 3191EB563M7R5BPA1             | 7.0                       | 17.1 19.5                                   | 2.00x2.625          | 47000                 | 3191EC473M010BPA1             | 7.4                       | 16.2 18.1                                   | 2.00x3.125          |
| 68000                   | 3191EC683M7R5BPA1             | 9.2                       | 15.8 17.7                                   | 2.00x3.125          | 56000                 | 3191BH563M010BPA1             | 7.1                       | 18.1 19.5                                   | 1.375x5.625         |
| 82000                   | 3191ED823M7R5BPA1             | 7.9                       | 17.3 19.5                                   | 2.00x3.625          | 56000                 | 3191EC563M010BPA1             | 7.1                       | 17.1 19.5                                   | 2.00x3.125          |
| 100000                  | 3191EE104M7R5BPA1             | 6.9                       | 19.6 22.1                                   | 2.00x4.125          | 68000                 | 3191ED683M010BPA1             | 7.7                       | 17.3 19.6                                   | 2.00x3.625          |
| 120000                  | 3191EF124M7R5BPA1             | 6.4                       | 21.5 23.9                                   | 2.00x4.625          | 82000                 | 3191EE823M010BPA1             | 6.9                       | 19.7 22.3                                   | 2.00x4.125          |
| 150000                  | 3191EG154M7R5BPA1             | 5.7                       | 23.7 26.1                                   | 2.00x5.125          | 100000                | 3191EF104M010BPA1             | 6.0                       | 21.9 24.3                                   | 2.00x4.625          |
|                         |                               |                           |                                             |                     | 120000                | 3191EE124M010BPA1             | 5.7                       | 23.0 26.0                                   | 2.00x4.125          |

# Type 3191 Aluminum Electrolytic, Screw Terminals, Switching and Audio Output

| Cap                     | Type 3191         | ESR max      | Ripple max   |           | Case Size   | Cap                     | Type 3191         | ESR max      | Ripple max   |           | Case Size   |
|-------------------------|-------------------|--------------|--------------|-----------|-------------|-------------------------|-------------------|--------------|--------------|-----------|-------------|
| (μF)                    | Catalog           | 120 Hz 25 °C | 120 Hz 85 °C |           | DxL         | (μF)                    | Catalog           | 120 Hz 25 °C | 120 Hz 85 °C |           | DxL         |
|                         | Part Number       | (mΩ)         | potted (A)   | rilled(A) | (in)        |                         | Part Number       | (mΩ)         | potted (A)   | rilled(A) | (in)        |
| 16 Vdc (20.8 Vdc Surge) |                   |              |              |           |             | 28 Vdc (36.4 Surge)     |                   |              |              |           |             |
| 10000                   | 3191BA103M016BPA1 | 16.7         | 8.2          | 9.3       | 1.375x2.125 | 18000                   | 3191BF183M028BPA1 | 9.9          | 14.6         | 15.9      | 1.375x4.625 |
| 12000                   | 3191BB123M016BPA1 | 14.2         | 9.2          | 10.4      | 1.375x2.625 | 18000                   | 3191EB183M028BPA1 | 9.9          | 14.2         | 15.9      | 2.00x2.625  |
| 15000                   | 3191BC153M016BPA1 | 11.7         | 10.8         | 12.1      | 1.375x3.125 | 22000                   | 3191BG223M028BPA1 | 8.6          | 7.0          | 7.5       | 1.375x5.125 |
| 18000                   | 3191BC183M016BPA1 | 11.3         | 12.1         | 13.5      | 1.375x3.125 | 22000                   | 3191EC223M028BPA1 | 8.6          | 6.6          | 7.5       | 2.00x3.125  |
| 22000                   | 3191BD223M016BPA1 | 9.8          | 12.8         | 14.2      | 1.375x3.625 | 27000                   | 3191ED273M028BPA1 | 8.1          | 16.9         | 19.1      | 2.00x3.625  |
| 22000                   | 3191EA223M016BPA1 | 9.8          | 12.5         | 14.2      | 2.00x2.125  | 33000                   | 3191EE333M028BPA1 | 7.3          | 19.2         | 21.7      | 2.00x4.125  |
| 27000                   | 3191BF273M016BPA1 | 8.4          | 15.4         | 16.8      | 1.375x4.625 | 39000                   | 3191EF393M028BPA1 | 6.6          | 21.5         | 23.9      | 2.00x4.625  |
| 27000                   | 3191EB273M016BPA1 | 8.4          | 14.7         | 16.8      | 2.00x2.625  | 47000                   | 3191EG473M028BPA1 | 6.0          | 22.8         | 25.3      | 2.00x5.125  |
| 33000                   | 3191BG333M016BPA1 | 7.6          | 17.2         | 18.4      | 1.375x5.125 | 35 Vdc (45.5 Vdc Surge) |                   |              |              |           |             |
| 33000                   | 3191EC333M016BPA1 | 7.6          | 16.1         | 18.4      | 2.00x3.125  | 3900                    | 3191BA392M035BPA1 | 25.4         | 6.8          | 7.7       | 1.375x2.125 |
| 39000                   | 3191EC393M016BPA1 | 9.1          | 15.7         | 17.9      | 2.00x3.125  | 4700                    | 3191BB472M035BPA1 | 21.2         | 7.9          | 8.9       | 1.375x2.625 |
| 47000                   | 3191ED473M016BPA1 | 7.8          | 17.4         | 19.7      | 2.00x3.625  | 5600                    | 3191BB562M035BPA1 | 19.1         | 8.2          | 9.3       | 1.375x2.625 |
| 56000                   | 3191EE563M016BPA1 | 7.1          | 19.0         | 21.5      | 2.00x4.125  | 6800                    | 3191BC682M035BPA1 | 17.2         | 8.8          | 9.9       | 1.375x3.125 |
| 68000                   | 3191EF683M016BPA1 | 6.4          | 21.2         | 23.5      | 2.00x4.625  | 8200                    | 3191BD822M035BPA1 | 14.7         | 10.7         | 11.9      | 1.375x3.625 |
| 82000                   | 3191EG823M016BPA1 | 5.9          | 22.8         | 25.3      | 2.00x5.125  | 10000                   | 3191BD103M035BPA1 | 12.9         | 11.7         | 13        | 1.375x3.625 |
| 20 Vdc (26 Vdc Surge)   |                   |              |              |           |             | 10000                   | 3191EA103M035BPA1 | 12.9         | 11.4         | 13        | 2.00x2.125  |
| 8200                    | 3191BA822M020BPA1 | 18.2         | 7.8          | 8.9       | 1.375x2.125 | 12000                   | 3191BF123M035BPA1 | 11.4         | 13.1         | 14.3      | 1.375x4.625 |
| 10000                   | 3191BB103M020BPA1 | 15.1         | 8.9          | 10.1      | 1.375x2.625 | 12000                   | 3191EB123M035BPA1 | 11.4         | 12.8         | 14.3      | 2.00x2.625  |
| 12000                   | 3191BB123M020BPA1 | 14.2         | 9.6          | 10.8      | 1.375x2.625 | 15000                   | 3191BG153M035BPA1 | 9.6          | 14.8         | 15.8      | 1.375x5.125 |
| 15000                   | 3191BC153M020BPA1 | 11.9         | 11.1         | 12.4      | 1.375x3.125 | 15000                   | 3191EC153M035BPA1 | 9.6          | 14.1         | 15.8      | 2.00x3.125  |
| 18000                   | 3191BD183M020BPA1 | 11.0         | 12.5         | 13.9      | 1.375x3.625 | 18000                   | 3191ED183M035BPA1 | 8.8          | 16.7         | 18.9      | 2.00x3.625  |
| 22000                   | 3191BE223M020BPA1 | 9.3          | 13.9         | 15.4      | 1.375x4.125 | 22000                   | 3191ED223M035BPA1 | 8.1          | 17.9         | 20.2      | 2.00x3.625  |
| 22000                   | 3191EA223M020BPA1 | 9.3          | 13.5         | 15.4      | 2.00x2.125  | 27000                   | 3191EF273M035BPA1 | 6.9          | 20.2         | 22.8      | 2.00x4.125  |
| 27000                   | 3191BF273M020BPA1 | 8.0          | 16.0         | 17.4      | 1.375x4.625 | 33000                   | 3191EG333M035BPA1 | 6.4          | 22.2         | 24.6      | 2.00x5.125  |
| 27000                   | 3191EB273M020BPA1 | 8.0          | 15.5         | 17.4      | 2.00x2.625  | 39000                   | 3191EH393M035BPA1 | 6.0          | 24.4         | 26.8      | 2.00x5.625  |
| 33000                   | 3191BH333M020BPA1 | 7.3          | 18.0         | 19.4      | 1.375x5.625 | 55 Vdc (71.5 Vdc Surge) |                   |              |              |           |             |
| 33000                   | 3191EC333M020BPA1 | 7.3          | 17.0         | 19.4      | 2.00x3.125  | 2700                    | 3191BA272M055BPA1 | 33.2         | 6.3          | 7.2       | 1.375x2.125 |
| 39000                   | 3191ED393M020BPA1 | 7.9          | 16.7         | 18.9      | 2.00x3.625  | 3900                    | 3191BB392M055BPA1 | 23.3         | 8.0          | 9         | 1.375x2.625 |
| 47000                   | 3191EE473M020BPA1 | 7.0          | 19.6         | 21.7      | 2.00x4.125  | 4700                    | 3191BC472M055BPA1 | 19.4         | 9.1          | 10.2      | 1.375x3.125 |
| 56000                   | 3191EF563M020BPA1 | 6.4          | 21.9         | 23.9      | 2.00x4.625  | 5600                    | 3191BD562M055BPA1 | 16.4         | 10.5         | 11.6      | 1.375x3.625 |
| 68000                   | 3191EG683M020BPA1 | 5.9          | 22.3         | 24.8      | 2.00x5.125  | 6800                    | 3191BE682M055BPA1 | 15.2         | 11.6         | 12.9      | 1.375x4.125 |
| 82000                   | 3191EH823M020BPA1 | 5.6          | 24.6         | 27.1      | 2.00x5.625  | 6800                    | 3191EA682M055BPA1 | 15.2         | 11.3         | 12.9      | 2.00x2.125  |
| 28 Vdc (36.4 Surge)     |                   |              |              |           |             | 8200                    | 3191BF822M055BPA1 | 12.7         | 13.5         | 14.7      | 1.375x4.625 |
| 4700                    | 3191BA472M028BPA1 | 23.4         | 6.6          | 7.5       | 1.375x2.125 | 8200                    | 3191EB822M055BPA1 | 12.7         | 12.9         | 14.7      | 2.00x2.625  |
| 5600                    | 3191BB562M028BPA1 | 22.5         | 7.0          | 7.9       | 1.375x2.625 | 10000                   | 3191BH103M055BPA1 | 10.9         | 16.1         | 17.2      | 1.375x5.625 |
| 6800                    | 3191BB682M028BPA1 | 19.0         | 7.5          | 8.5       | 1.375x2.625 | 10000                   | 3191EC103M055BPA1 | 10.9         | 15.1         | 17.2      | 2.00x3.125  |
| 8200                    | 3191BB822M028BPA1 | 17.5         | 8.3          | 9.4       | 1.375x2.625 | 12000                   | 3191ED123M055BPA1 | 9.9          | 16.5         | 18.6      | 2.00x3.625  |
| 10000                   | 3191BC103M028BPA1 | 15.0         | 10.1         | 11.3      | 1.375x3.125 | 15000                   | 3191EE153M055BPA1 | 8.9          | 18.0         | 20.3      | 2.00x4.125  |
| 12000                   | 3191BD123M028BPA1 | 12.7         | 11.4         | 12.7      | 1.375x3.625 | 18000                   | 3191EF183M055BPA1 | 7.8          | 19.6         | 21.8      | 2.00x4.625  |
| 15000                   | 3191BE153M028BPA1 | 11.2         | 12.7         | 14.1      | 1.375x4.125 | 22000                   | 3191EG223M055BPA1 | 7.1          | 21.7         | 24.1      | 2.00x5.125  |
| 15000                   | 3191EA153M028BPA1 | 11.2         | 12.4         | 14.1      | 2.00x2.125  |                         |                   |              |              |           |             |

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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