

## Wirewound Resistors, Industrial Power, Silicone Coated, Adjustable Edgewound Tubular


**FEATURES**

- High temperature silicone coating
- Complete welded construction
- Tight tolerance of 5 % for values above 1  $\Omega$
- Excellent stability in operation (< 3 % change in resistance)
- Material categorization:  
for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



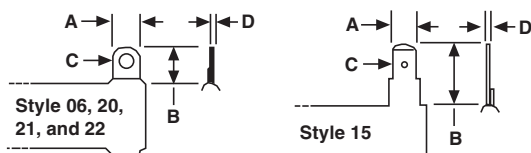
**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

| STANDARD ELECTRICAL SPECIFICATIONS |                  |   |   |  |                       |
|------------------------------------|------------------|---|---|--|-----------------------|
| GLOBAL MODEL                       | HISTORICAL MODEL | POWER RATING<br>$P_{25\text{ }^\circ\text{C}}$<br>W | RESISTANCE RANGE<br>$\Omega$<br>$\pm 5\%$ | RESISTANCE RANGE<br>$\Omega$<br>$\pm 10\%$ | WEIGHT (typical)<br>g |
| ASE0050                            | ASE-50           | 50  | 1.0 to 3.8                                | 1.0 to 3.8                                 | 18                    |
| ASE0090                            | ASE-90           | 90  | 0.10 to 5.7                               | 0.10 to 5.7                                | 36                    |
| ASE0100                            | ASE-100          | 100   | 1.0 to 6.1                                | 0.15 to 6.1                                | 41                    |
| ASE0110                            | ASE-110          | 110   | 1.0 to 7.4                                | 0.20 to 7.4                                | 49                    |
| ASE0120                            | ASE-120          | 120   | 1.0 to 8.6                                | 0.1 to 8.6                                 | 54                    |
| ASE0155                            | ASE-155          | 155   | 1.0 to 12.5                               | 0.1 to 12.5                                | 129                   |
| ASE0240                            | ASE-240          | 240   | 1.0 to 18                                 | 0.1 to 18                                  | 186                   |
| ASE0300                            | ASE-300          | 300   | 1.0 to 25                                 | 0.15 to 25                                 | 236                   |
| ASE0375                            | ASE-375          | 375   | 1.0 to 32                                 | 0.20 to 32                                 | 286                   |
| ASE0420                            | ASE-420          | 420   | 1.0 to 35.8                               | 0.25 to 35.8                               | 320                   |
| ASE0500                            | ASE-500          | 500   | 0.30 to 46.2                              | 0.30 to 46.2                               | 381                   |
| ASE0750                            | ASE-750          | 750   | 0.35 to 81.3                              | 0.35 to 81.3                               | 654                   |
| ASE1000                            | ASE-1000         | 1000  | 0.40 to 101.6                             | 0.40 to 101.6                              | 817                   |
| ASE1500                            | ASE-1500         | 1500  | 0.45 to 135.5                             | 0.45 to 135.5                              | 1090                  |

| GLOBAL PART NUMBER INFORMATION  |                                    |                              |                                    |                                 |                                       |   |   |   |   |   |   |   |   |   |   |   |   |
|---|------------------------------------|------------------------------|------------------------------------|---------------------------------|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Global Part Numbering example: ASE030020E15R0JE92 (visit <a href="http://www.vishay.net">www.vishay.net</a> SAP parts manual for all options) |                                    |                              |                                    |                                 |                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| A   | S                                  | E                            | 0                                  | 3                               | 0                                     | 0   | 2 | 0 | E | 1 | 5 | R | 0 | J | E | 9 | 2 |
| GLOBAL MODEL<br>(7 digits)  | TERMINAL DESIGNATION<br>(2 digits) | TERMINAL FINISH<br>(1 digit) | VALUE<br>(4 digits)                | TOLERANCE<br>(1 digit)          | PACKAGING CODE<br>(1 digit)           | SPECIAL<br>(up to 2 digits)   |   |   |   |   |   |   |   |   |   |   |   |
| (See Standard Electrical Specifications Global Model column for options)  | 06<br>15<br>20<br>21<br>22         | E = Lead (Pb)-free           | R = Decimal<br>1R50 = 1.5 $\Omega$ | J = $\pm 5\%$<br>K = $\pm 10\%$ | E = Lead (Pb)-free cell and bulk pack | (Dash number)<br>From 1 to 99 as applicable<br>91 = 100 style horizontal thru-bolt bracket<br>92 = 200 style push-in bracket<br>93 = 300 style vertical thru-bolt bracket |   |   |   |   |   |   |   |   |   |   |   |
| Historical Part Number example: ASE-300-15-10%-BKTS   |                                    |                              |                                    |                                 |                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| ASE-300   | 15 $\Omega$                        | 10 %                         | BKTS                               |                                 |                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| HISTORICAL MODEL  | RESISTANCE VALUE                   | TOLERANCE                    | SPECIAL                            |                                 |                                       |   |   |   |   |   |   |   |   |   |   |   |   |

**DIMENSIONS** in inches [millimeters]


| MODEL   | CORE DIMENSIONS               |                             |                             | TERMINAL SETBACK | DISTANCE CENTER TO CENTER (REF.) | TERMINAL DESIGNATION |                          | SLIDER MODEL NUMBER |
|---------|-------------------------------|-----------------------------|-----------------------------|------------------|----------------------------------|----------------------|--------------------------|---------------------|
|         | LENGTH<br>± 0.062<br>[± 1.57] | O.D.<br>± 0.031<br>[± 0.79] | I.D.<br>± 0.031<br>[± 0.79] |                  |                                  | STANDARD             | OPTIONAL (QUICK CONNECT) |                     |
| ASE0050 | 2.000<br>[50.8]               | 0.750<br>[19.05]            | 0.500<br>[12.70]            | 0.094<br>[2.38]  | 1.562<br>[39.67]                 | 06                   | 15                       | 71                  |
| ASE0090 | 4.000<br>[101.6]              | 0.563<br>[14.30]            | 0.313<br>[7.95]             | 0.094<br>[2.38]  | 3.562<br>[90.47]                 | 06                   | 15                       | 71                  |
| ASE0100 | 3.500<br>[88.90]              | 0.750<br>[19.05]            | 0.500<br>[12.70]            | 0.079<br>[2.39]  | 3.092<br>[78.54]                 | 06                   | 15                       | 74                  |
| ASE0110 | 4.000<br>[101.6]              | 0.750<br>[19.05]            | 0.500<br>[12.70]            | 0.125<br>[3.18]  | 3.500<br>[88.90]                 | 06                   | 15                       | 74                  |
| ASE0120 | 4.500<br>[114.3]              | 0.750<br>[19.05]            | 0.547<br>[13.89]            | 0.125<br>[3.18]  | 4.000<br>[101.60]                | 06                   | 15                       | 74                  |
| ASE0155 | 4.250<br>[107.95]             | 1.125<br>[28.58]            | 0.750<br>[19.05]            | 0.282<br>[7.16]  | 3.311<br>[84.10]                 | 20                   | 15                       | 74                  |
| ASE0240 | 6.500<br>[165.1]              | 1.125<br>[28.58]            | 0.750<br>[19.05]            | 0.282<br>[7.16]  | 5.561<br>[141.25]                | 20                   | 15                       | 75                  |
| ASE0300 | 8.500<br>[215.9]              | 1.125<br>[28.58]            | 0.750<br>[19.05]            | 0.267<br>[6.78]  | 7.591<br>[192.81]                | 20                   | 15                       | 75                  |
| ASE0375 | 10.500<br>[266.7]             | 1.125<br>[28.58]            | 0.750<br>[19.05]            | 0.266<br>[6.76]  | 9.591<br>[243.61]                | 20                   | 15                       | 75                  |
| ASE0420 | 11.750<br>[298.45]            | 1.125<br>[28.58]            | 0.750<br>[19.05]            | 0.266<br>[6.76]  | 10.843<br>[275.41]               | 20                   | 15                       | 76                  |
| ASE0500 | 10.500<br>[266.7]             | 1.625<br>[41.28]            | 1.125<br>[28.58]            | 0.266<br>[6.76]  | 9.468<br>[240.49]                | 21                   | -                        | 78                  |
| ASE0750 | 12.000<br>[304.8]             | 2.500<br>[63.5]             | 1.750<br>[44.45]            | 0.508<br>[12.90] | 10.484<br>[266.29]               | 21                   | -                        | 77                  |
| ASE1000 | 15.000<br>[381.0]             | 2.500<br>[63.50]            | 1.750<br>[44.45]            | 0.508<br>[12.90] | 13.484<br>[342.49]               | 22                   | -                        | 78                  |
| ASE1500 | 20.000<br>[508.0]             | 2.500<br>[63.50]            | 1.750<br>[44.45]            | 0.508<br>[12.90] | 18.484<br>[469.49]               | 22                   | -                        | 78                  |

**TERMINAL DIMENSIONS** in inches [millimeters]


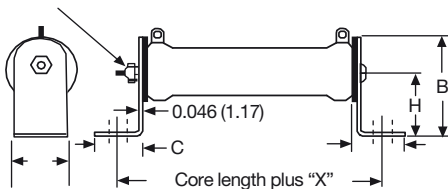
| DIMENSIONS        | TERMINAL STYLE   |                  |                   |                  |                  |
|-------------------|------------------|------------------|-------------------|------------------|------------------|
|                   | 06               | 15               | 20                | 21               | 22               |
| A                 | 0.250<br>[6.35]  | 0.250<br>[6.35]  | 0.375<br>[9.53]   | 0.500<br>[12.70] | 0.500<br>[12.70] |
| B                 | 0.500<br>[12.70] | 0.594<br>[15.08] | 0.5625<br>[14.28] | 0.625<br>[15.87] | 0.925<br>[23.49] |
| C (HOLE DIAMETER) | 0.173<br>[4.39]  | 0.065<br>[1.65]  | 0.204<br>[5.18]   | 0.264<br>[6.70]  | 0.264<br>[6.70]  |
| D                 | 0.020<br>[0.51]  | 0.031<br>[0.79]  | 0.032<br>[0.812]  | 0.025<br>[0.64]  | 0.025<br>[0.64]  |

| ASE SLIDERS-DIMENSIONS in inches [millimeters] |  |                                       |                           |               |               |                  |
|--|--|---------------------------------------|---------------------------|---------------|---------------|------------------|
|  | GLOBAL PART NUMBER (1)<br>(RoHS COMPLIANT) | GLOBAL MODEL<br>(OF RESISTOR)         | SLIDER<br>MODEL<br>NUMBER | DIMENSIONS    |               |                  |
|  |  |                                       |                           | WIDTH         | HEIGHT        | HOLE<br>DIAMETER |
|  | 75008603E29                                | ASE0050, ASE0090                      | 71                        | 0.250 [6.35]  | 0.719 [18.26] | 0.141 [3.58]     |
|  | 75025201E29                                | ASE0100, ASE0110,<br>ASE0120, ASE0155 | 74                        | 0.312 [7.92]  | 0.891 [22.63] | 0.196 [4.98]     |
|  | 75025203E29                                | ASE0240, ASE0300,<br>ASE0375          | 75                        | 0.500 [12.70] | 0.891 [22.63] | 0.265 [6.73]     |
|  | 75025204E29                                | ASE0500, ASE1000,<br>ASE1500, ASE2000 | 78                        | 0.500 [12.70] | 0.891 [22.63] | 0.265 [6.73]     |
|  | 75025206E29                                | ASE0420                               | 76                        | 0.312 [7.92]  | 0.891 [22.63] | 0.196 [4.98]     |
|  | 75025207E29                                | ASE0750                               | 77                        | 0.500 [12.70] | 0.891 [22.63] | 0.265 [6.73]     |

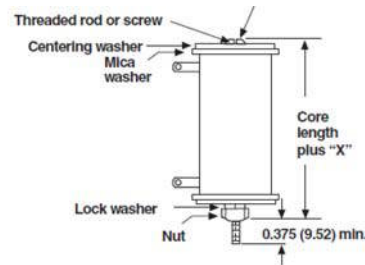
**Note**

(1) Order HEI slider with global part number.

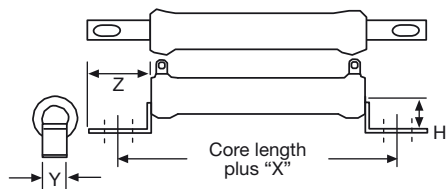
**MOUNTING HARDWARE FOR AVT PRODUCTS** - Dimensions in inches [millimeters]

**91 = 100 Style Horizontal 1 High Bracket**


| BRACKET TYPE | X             | Y             | Z             | H             | MOUNTING SLOT                | C             | B             |
|--------------|---------------|---------------|---------------|---------------|------------------------------|---------------|---------------|
| 102          | 1.063 [26.99] | 0.750 [19.05] | 0.859 [21.83] | 1.250 [31.75] | 0.219 x 0.438 [5.56 x 11.11] | 0.750 [19.05] | 1.750 [44.75] |
| 103          | 1.063 [26.99] | 1.250 [31.75] | 1.000 [25.40] | 1.500 [38.10] | 0.281 x 0.563 [7.14 x 14.29] | 0.927 [23.55] | 2.125 [53.98] |
| 104          | 1.952 [49.58] | 2.500 [63.50] | 1.478 [37.54] | 3.000 [76.20] | open slot x 0.406 [10.31]    | 1.375 [34.93] | 4.25 [107.25] |

**93 = 300 Style Thru-Bolt Bracket**


| BRACKET TYPE | X (APPROXIMATE) | THREAD |
|--------------|-----------------|--------|
| 302          | 0.271 [6.88]    | 10-32  |
| 303          | 0.463 [11.76]   | 1/4-20 |

**92 = 200 Style Push-In Bracket**


| BRACKET TYPE | X             | H             | Y             | Z             | HOLE (DIA.)                 |
|--------------|---------------|---------------|---------------|---------------|-----------------------------|
| 204          | 0.700 [17.78] | 0.578 [14.68] | 0.250 [6.35]  | 0.500 [12.70] | 0.156 [3.96]                |
| 206          | 0.846 [21.49] | 0.800 [20.62] | 0.375 [9.53]  | 0.600 [15.24] | 0.343 x 0.213 [8.71 x 5.46] |
| 207          | 0.700 [17.78] | 1.125 [28.58] | 0.500 [12.70] | 0.687 [17.45] | 0.250 x 0.188 [6.35 x 4.78] |

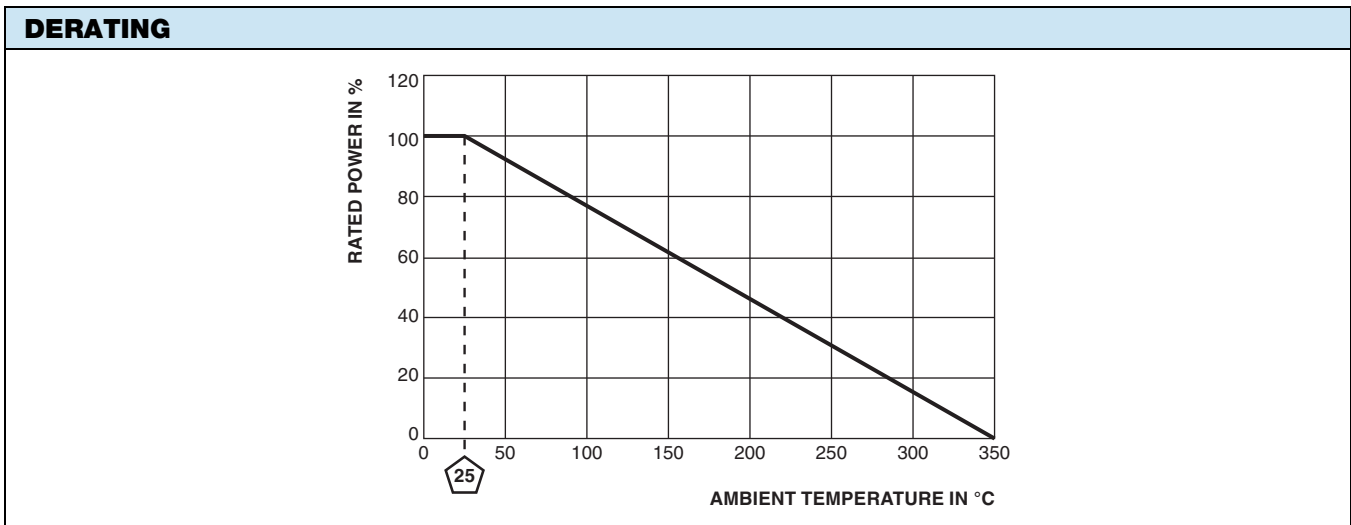
**MOUNTING HARDWARE**

| GLOBAL MODEL | AVAILABLE BRACKET TYPES BY MODEL         |                                |                                  |
|--------------|--|--------------------------------|----------------------------------|
|              | 91 = 100 STYLE HORIZONTAL 1 HIGH BRACKET | 92 = 200 STYLE PUSH-IN BRACKET | 93 = 300 STYLE THRU-BOLT BRACKET |
| ASE0050      | 102                                      | 206                            | 302                              |
| ASE0090      | 102                                      | 204                            | 302                              |
| ASE0100      | 102                                      | 206                            | 302                              |
| ASE0110      | 102                                      | 206                            | 302                              |
| ASE0120      | 102                                      | 206                            | 302                              |
| ASE0155      | 103                                      | 207                            | 302                              |
| ASE0240      | 103                                      | 207                            | 302                              |
| ASE0300      | 103                                      | 207                            | 303                              |
| ASE0375      | 103                                      | 207                            | 303                              |
| ASE0420      | 103                                      | 207                            | 303                              |
| ASE0500      | 103                                      | -                              | 302                              |
| ASE0750      | 104                                      | -                              | 302                              |
| ASE1000      | 104                                      | -                              | 302                              |
| ASE1500      | 104                                      | -                              | 303                              |



| TECHNICAL SPECIFICATIONS               |                   |   |
|--|-------------------|---|
| PARAMETER                              | UNIT              | RESISTOR CHARACTERISTICS  |
| Power Rating                           | W                 | 50 to 1500  |
| Resistance Range                       | $\Omega$          | 0.10 to 135.5   |
| Resistance Tolerance                   | %                 | 10  |
| Temperature Coefficient                | ppm/ $^{\circ}$ C | $\pm 260$ for 20 $\Omega$ and above, $\pm 400$ for 1 $\Omega$ to 19.99 $\Omega$         |
| Operating Temperature                  | $^{\circ}$ C      | -55 $^{\circ}$ C to 350 $^{\circ}$ C  |
| Temperature Rise                       | $^{\circ}$ C      | 325 $^{\circ}$ C above an ambient of 25 $^{\circ}$ C                                    |
| Maximum Altitude                       | f.a.s.l.          | 10 000  |
| Short-Term Overload                    | -                 | 10x rated power for 5 s   |
| Surge Windings                         | -                 | Available   |
| Maximum Working Voltage                | -                 | $(P \times R)^{0.5}$  |
| Insulation Resistance                  | $\Omega$          | 1M  |
| Dielectric Voltage                     | V <sub>RMS</sub>  | 1000 V <sub>AC</sub>  |
| Creepage                               | -                 | Varies by wattage, see "Terminal Setback" in Dimensions table                           |
| Terminal Sleeves                       | -                 | n/a   |
| Inductance                             | $\mu$ H           | Varies by wattage and resistance  |
| Non-Inductive Winding                  | -                 | n/a   |
| Terminal Strength                      | lb                | 10 lbs  |
| Electrical or Mechanical Customization | -                 | Contact factory: <a href="mailto:ww2dresistors@vishay.com">ww2dresistors@vishay.com</a> |

| MATERIAL SPECIFICATIONS |   |
|-------------------------|---|
| Element                 | Copper-nickel alloy or nickel-chrome alloy, depending on resistance value |
| Core                    | Cordierite, steatite  |
| Coating                 | Special high temperature silicone   |
| Standard Terminals      | Tinned alloy 42   |
| Optional Terminals      | Alloy 42  |
| Terminal Bands          | Alloy 42  |
| Part Marking            | HEI, model, wattage, value, tolerance, date code                          |





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## Material Category Policy

**Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.**

**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**

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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.

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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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