

**Micro Commercial Components** 



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## AK1-076C THRU AK15-076C

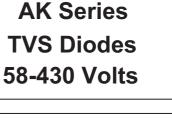
### Features

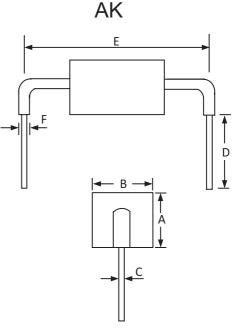
- Axial Lead Terminals
- High Current Transient Suppressor
- Excellent Clamping Capability
- Glass Passivated Junction
- Bi-directional
- Low Slope Resistance
- Repetition Rate(duty cycle):0.01%
- Halogen Free
- High Temperature Soldering:260°C/10 Seconds at Terminals
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- UL Approved, UL File#: E480232

#### **Maximum Ratings And Thermal Characterics**

| Parameter  | Symbol                             | Va         | lue | Unit  |
|--|------------------------------------|------------|-----|-------|
| Current Rating,Rated IPP<br>Measured With 8/20us Pulse | lpp                                | AK1        | 1   | KAmps |
|  |                                    | AK3        | 3   |       |
|  |                                    | AK6        | 6   |       |
|  |                                    | AK10       | 10  |       |
|  |                                    | AK15       | 15  |       |
| Operating Junction and<br>Storage Temperature<br>Range | T <sub>J</sub><br>T <sub>STG</sub> | -55 to+150 |     | °C    |

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a





| DIMENSIONS |                                 |   |  |   |  |
|------------|---------------------------------|---|--|---|--|
| INCHES     |                                 | MM  |  |   |  |
| MIN        | MAX                             | MIN   | MAX  | NOTE  |  |
|            | .630                            |   | 16.00  |   |  |
|            | .709                            |   | 18.00  |   |  |
| .047       | .052                            | 1.20  | 1.32   |   |  |
| .197       |                                 | 5.00  |  |   |  |
| .922       | .979                            | 23.43   | 24.87  |   |  |
|            | .157                            |   | 4.00   |   |  |
|            |                                 |   |  |   |  |
|            |                                 |   |  |   |  |
|            |                                 |   |  |   |  |
|            | MIN<br><br>.047<br>.197<br>.922 | INCHES<br>MIN MAX<br>630<br>709<br>.047 .052<br>.197<br>.922 .979 | INCHES M   MIN MAX MIN    .630     .709    .047 .052 1.20   .197  5.00   .922 .979 23.43 | INCHES MM   MIN MAX MIN MAX    .630  16.00    .709  18.00   .047 .052 1.20 1.32   .197  5.00    .922 .979 23.43 24.87 |  |

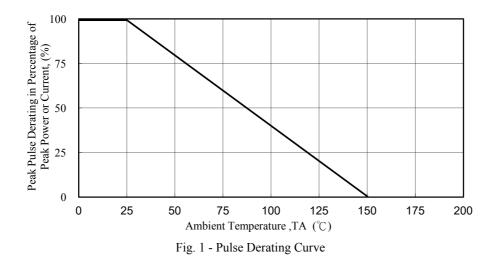
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| Electrical en | ui ue ce i 15 ci      |        | C unless of          | iner wise inc   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                                |                    |
|---------------|-----------------------|--------|----------------------|-----------------|---|--------------------------------|--------------------|
| Part Number   | Reverse<br>Of<br>Volt | ff     | Breakdown<br>Voltage | Test<br>Current | Surge<br>Current<br>Rating              | Maximum<br>Clamping<br>Voltage | Reverse<br>Leakage |
|               | VAC(V)                | VDC(V) | VBR(V)<br>MIN.@IT    | IT(mA)          | 8/20us<br>(KA)                          | VC(V)<br>@IPP                  | IR(μA)<br>@VDC     |
| AK1-076C      | 54                    | 76     | 83                   | 10              | 1                                       | 135                            | 20                 |
| AK3-058C      | 40                    | 58     | 64                   | 10              | 3                                       | 110                            | 20                 |
| AK3-066C      | 45                    | 66     | 70                   | 10              | 3                                       | 125                            | 20                 |
| AK3-076C      | 54                    | 76     | 85                   | 10              | 3                                       | 140                            | 20                 |
| AK3-380C      | 275                   | 380    | 401                  | 10              | 3                                       | 520                            | 20                 |
| AK3-430C      | 310                   | 430    | 440                  | 10              | 3                                       | 625                            | 20                 |
| AK6-058C      | 40                    | 58     | 64                   | 10              | 6                                       | 110                            | 20                 |
| AK6-066C      | 45                    | 66     | 70                   | 10              | 6                                       | 125                            | 20                 |
| AK6-076C      | 54                    | 76     | 83                   | 10              | 6                                       | 135                            | 20                 |
| AK6-170C      | 130                   | 170    | 180                  | 10              | 6                                       | 260                            | 20                 |
| AK6-190C      | 145                   | 190    | 200                  | 10              | 6                                       | 290                            | 20                 |
| AK6-240C      | 180                   | 240    | 250                  | 10              | 6                                       | 340                            | 20                 |
| AK6-380C      | 275                   | 380    | 401                  | 10              | 6                                       | 520                            | 20                 |
| AK6-430C      | 310                   | 430    | 440                  | 10              | 6                                       | 625                            | 20                 |
| AK10-058C     | 40                    | 58     | 64                   | 10              | 10                                      | 110                            | 20                 |
| AK10-066C     | 45                    | 66     | 70                   | 10              | 10                                      | 125                            | 20                 |
| AK10-076C     | 54                    | 76     | 83                   | 10              | 10                                      | 135                            | 20                 |
| AK10-170C     | 130                   | 170    | 180                  | 10              | 10                                      | 260                            | 20                 |
| AK10-190C     | 145                   | 190    | 200                  | 10              | 10                                      | 290                            | 20                 |
| AK10-200C     | 150                   | 200    | 222                  | 10              | 10                                      | 330                            | 20                 |
| AK10-240C     | 180                   | 240    | 250                  | 10              | 10                                      | 340                            | 20                 |
| AK10-380C     | 275                   | 380    | 401                  | 10              | 10                                      | 520                            | 20                 |
| AK10-430C     | 310                   | 430    | 440                  | 10              | 10                                      | 625                            | 20                 |
| AK15-058C     | 40                    | 58     | 64                   | 10              | 15                                      | 110                            | 20                 |
| AK15-076C     | 54                    | 76     | 85                   | 10              | 15                                      | 145                            | 20                 |

### Electrical Characteristics( $T_A = 25^{\circ}C$ unless otherwise noted)

### Ratings and Characteristics Curves (T<sub>A</sub>=25 °C unless otherwise noted)



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### **Typical Peak Pulse Power Rating Curve**



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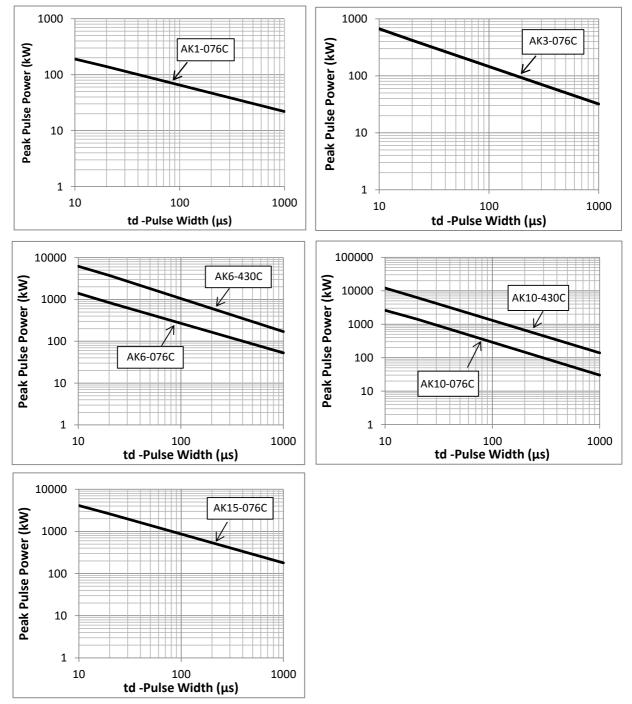


Fig.2 Peak Pulse Power Rating Curve

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### **Ordering Information**

| Device           | Packing         |
|------------------|-----------------|
| (Part Number)-BP | Bulk:150pcs/Box |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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