

### FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

### MAXIMUM RATINGS

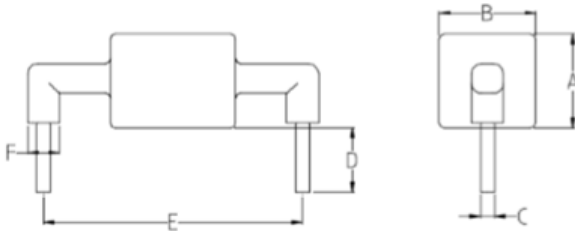
| Rating  | Symbol         | Value         |
|---|----------------|---------------|
| Current Rating, Rated $I_{PP}$ measured with 8/20 $\mu$ s pulse | $I_{PP}$       | 1KA           |
| Operating and Storage Temperature Range                         | $T_J, T_{STG}$ | -55° to 150°C |

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

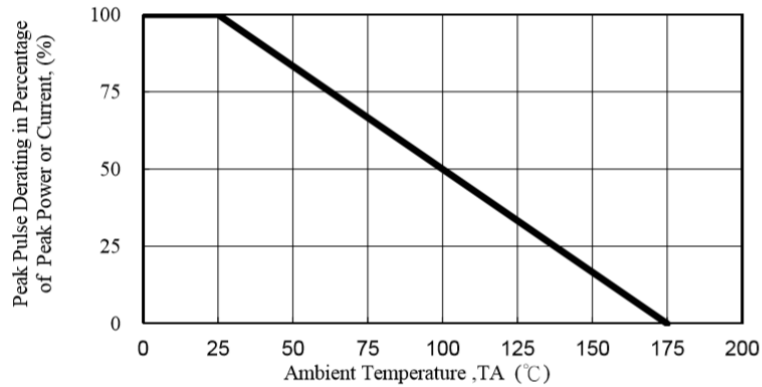
| Part number | Reverse Stand-Off Voltage | Breakdown Voltage | Test Current | Current Rating | Maximum Clamping Voltage | Maximum Reverse Leakage |
|-------------|---------------------------|-------------------|--------------|----------------|--------------------------|-------------------------|
|             |                           | $V_{(BR)} @ I_T$  | $I_T$        | $I_{PP}$       |                          | $I_R @ V_{DC}$          |
|             | $V_{DC}$                  | VOLTS             | mA           | 8/20 $\mu$ s   | $V_C @ I_{PP}$           | $I_D$                   |
|             | VOLTS                     | MIN               |              | KA             |                          | VOLTS                   |
| DGK1076     | 54                        | 83                | 10           | 1              | 135                      | 20                      |

### MECHANICAL CHARACTERISTICS

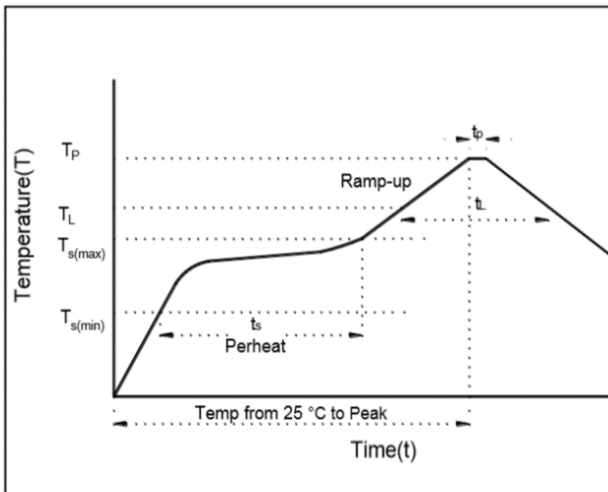
|          |               |
|----------|---------------|
| Case:    | DIGI K1       |
| Marking: | Alpha-Numeric |



|   | DIGI K1 |       |             |        |
|---|---------|-------|-------------|--------|
|   | Inches  |       | Millimeters |        |
|   | Min     | Max   | Min         | Max    |
| A | -       | 0.571 | -           | 14.500 |
| B | -       | 0.500 | -           | 12.700 |
| C | 0.047   | 0.055 | 1.200       | 1.400  |
| D | 0.257   | 0.295 | 6.500       | 7.500  |
| E | 0.922   | 0.978 | 23.45       | 24.85  |
| F | -       | 0.158 | -           | 4.000  |



Pulse Derating Curve



| IR- Reflow Condition     |                   |        |        |
|--------------------------|-------------------|--------|--------|
| Pre-Heat                 | Temp. Min         | 150    | °C     |
|                          | Temp. Max         | 200    | °C     |
|                          | Time (min to max) | 60-180 | sec    |
| Ramp up rate (150-200°C) |                   | < 3    | °C/sec |

|                               |                     |         |        |
|-------------------------------|---------------------|---------|--------|
| Reflow                        | Liquidus Temp.      | >220    | °C     |
|                               | Peak Temp.          | 255-260 | °C     |
|                               | Time (Liq. to peak) | 60-150  | °C     |
| Ramp up rate (220-200°C)      |                     | < 3     | °C/sec |
| Time within actual peak temp. |                     | 10-30   | sec    |

|                          |     |        |
|--------------------------|-----|--------|
| Ramp Down Rate           | < 5 | °C/sec |
| Time (25°C to peak temp) | < 6 | min    |
| Do not exceed            | 280 | °C     |