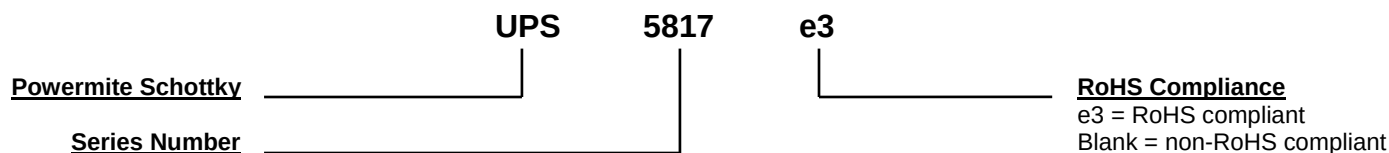


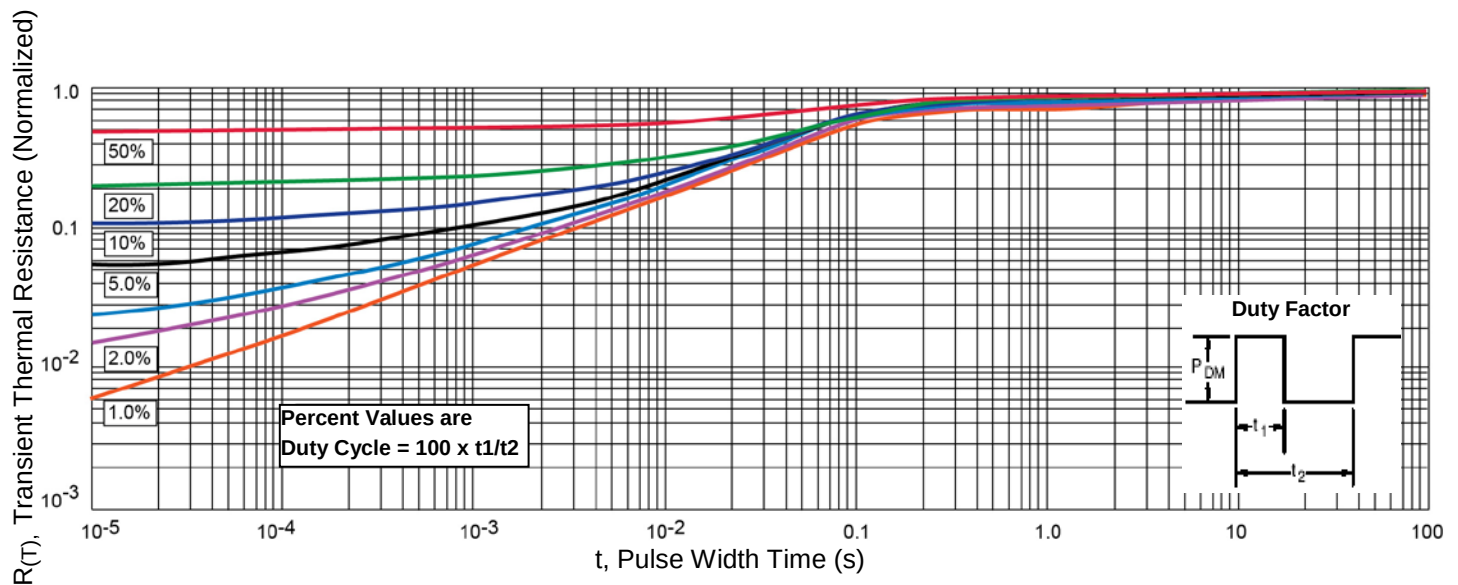
**MECHANICAL and PACKAGING**

- CASE: Molded epoxy package meets UL94V-0.
- TERMINALS: Copper with annealed matte-tin plating for RoHS compliance. Solderable per MIL-STD-750 method 2026. (Consult factory for tin-lead plating).
- MARKING: Body marked with "S17" or "S19".
- POLARITY: Cathode designated by Tab 1 (bottom).
- TAPE & REEL option: Packaging per EIA-481-B with 8 mm tape. Consult factory for quantities.
- WEIGHT: Approximately 0.016 grams.
- See [Package Dimensions](#) on last page.

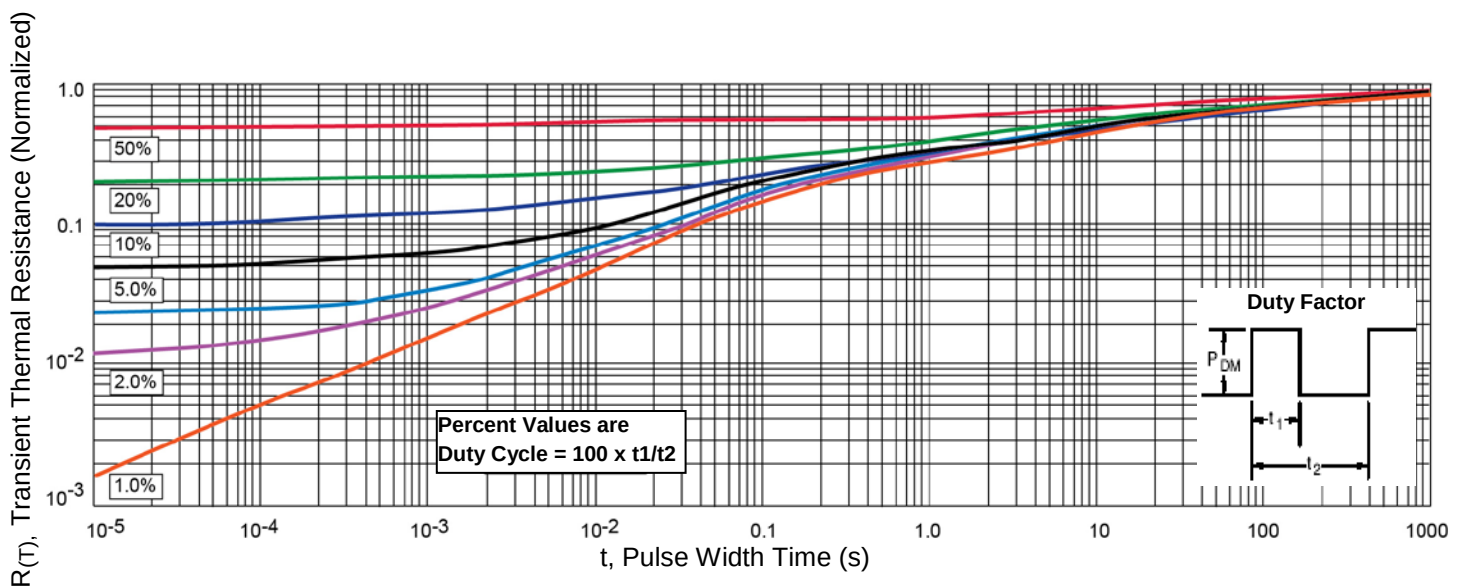
**PART NOMENCLATURE****ELECTRICAL CHARACTERISTICS**

| RATING (Conditions)                                                                                    | SYMBOL          | VALUE   |         | UNIT  |
|--------------------------------------------------------------------------------------------------------|-----------------|---------|---------|-------|
|                                                                                                        |                 | UPS5817 | UPS5819 |       |
| Maximum Instantaneous Forward Voltage <sup>(2)</sup> (I <sub>F</sub> = 1.0 A, T <sub>J</sub> = +25 °C) | V <sub>F</sub>  | 0.45    | 0.55    | Volts |
| Maximum Instantaneous Reverse Current <sup>(2)</sup> (V <sub>R</sub> = 20 V, T <sub>J</sub> = +25 °C)  | I <sub>RM</sub> | 1.0     | 1.0     | mA    |
| Typical Junction Capacitance (V <sub>R</sub> = 5V, f = 1 MHz)                                          | C <sub>J</sub>  | 105     | 60      | pF    |

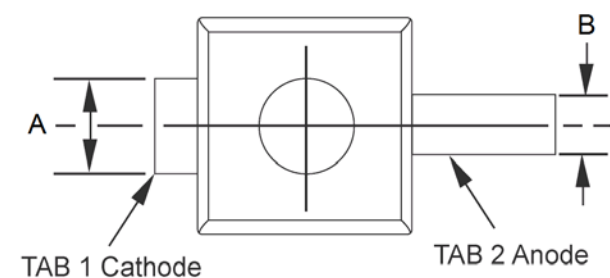
**Notes:** 2. Measured with a test pulse of 380 μs to minimize self-heating effect.

**GRAPHS**


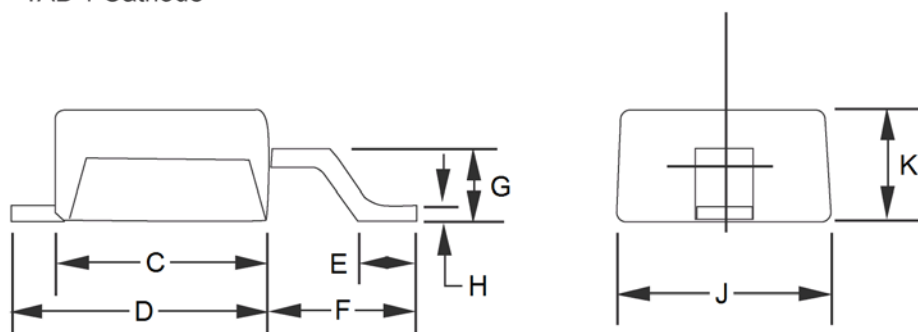
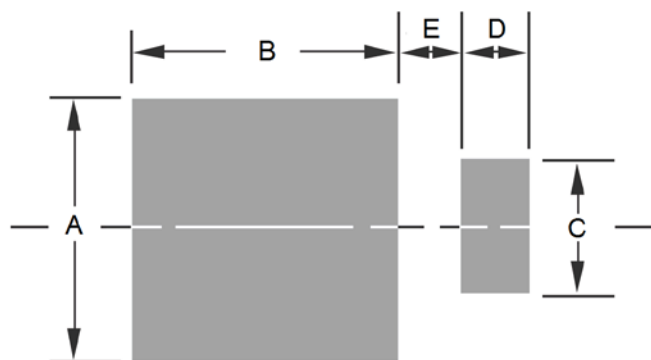
**FIGURE 1**  
Thermal Impedance Junction to Case



**FIGURE 2**  
Thermal Impedance Junction to Ambient

**PACKAGE DIMENSIONS**


| Ltr | Dimensions |       |             |      |
|-----|------------|-------|-------------|------|
|     | Inch       |       | Millimeters |      |
|     | Min        | Max   | Min         | Max  |
| A   | 0.029      | 0.039 | 0.73        | 0.99 |
| B   | 0.016      | 0.026 | 0.40        | 0.66 |
| C   | 0.070      | 0.080 | 1.77        | 2.03 |
| D   | 0.087      | 0.097 | 2.21        | 2.46 |
| E   | 0.020      | 0.030 | 0.50        | 0.76 |
| F   | 0.051      | 0.061 | 1.29        | 1.54 |
| G   | 0.021      | 0.031 | 0.53        | 0.78 |
| H   | 0.004      | 0.008 | 0.10        | 0.20 |
| J   | 0.070      | 0.080 | 1.77        | 2.03 |
| K   | 0.035      | 0.045 | 0.89        | 1.14 |


**PAD LAYOUT**


| Ltr | Dimensions |             |
|-----|------------|-------------|
|     | Inch       | Millimeters |
| A   | 0.100      | 2.54        |
| B   | 0.105      | 2.67        |
| C   | 0.050      | 1.27        |
| D   | 0.030      | 0.76        |
| E   | 0.025      | 0.64        |

**SCHEMATIC**
