

## Specification Status: Released

### Operating Conditions at 20°C:

Maximum Continuous Operating Voltage ( $V_{mco}$ ): 240V<sub>ac</sub>

### Fault Ratings at 20°C:

Maximum Limited Duration Voltage ( $V_{ldf}$ ): 400V<sub>rms</sub>

Maximum Limited Duration Current ( $I_{ldf}$ ): 40A

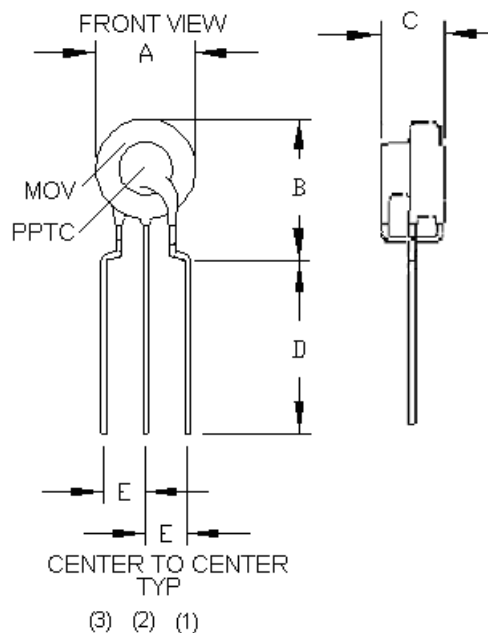
**Insulating Material: Cured, Flame Retardant Epoxy Polymer**  
(meeting UL94 V-0 requirements)

### Lead Material:

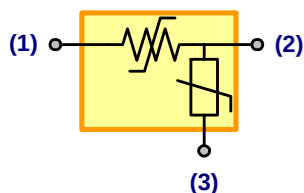
22 AWG Sn-Plated Copper (0.64 mm [0.025"] nominal diameter)

### Marking (on MOV side):

— Manufacturer's Mark  
**XA431** — Part Identification  
□□□□ — Lot Identification



### Electrical Schematic:



**TABLE I. DIMENSIONS:**

|      | A   |        | B   |        | C   |        | D      |        | E      |
|------|-----|--------|-----|--------|-----|--------|--------|--------|--------|
|      | MIN | MAX    | MIN | MAX    | MIN | MAX    | MIN    | MAX    | NOM    |
| mm:  | --  | 16.0   | --  | 21.0   | --  | 7.4    | 3.0    | 5.0    | 5.1    |
| in.* | --  | (0.63) | --  | (0.83) | --  | (0.29) | (0.12) | (0.20) | (0.20) |

\*Rounded off approximation

**TABLE II. PPTC-SECTION (TERMINALS 1-2) PERFORMANCE RATINGS @ 20°C:**

| HOLD<br>CURRENT<br>(A) | TRIP<br>CURRENT<br>(A) | RESISTANCE (Ω)† |       |                        | TIME TO<br>TRIP† (s)<br>@ 3A |         |
|------------------------|------------------------|-----------------|-------|------------------------|------------------------------|---------|
|                        |                        | R MIN           | R MAX | R <sub>1</sub><br>MAX* | TY<br>P                      | MA<br>X |
| 0.35                   | 0.75                   | 1.4             | 2.2   | 2.8                    | 0.5                          | 2.0     |

\*Maximum device resistance at 20°C measured 1 hour post trip.

† Corresponds to operations below varistor switch voltage.

**TABLE III. MOV-SECTION (TERMINALS 2-3) PERFORMANCE RATINGS @ 20°C:**

| VARISTOR VOLTAGE @ 1mA |           | DC RESISTANCE @ 100V | MAXIMUM CLAMPING VOLTAGE @ 50A | RATED WATTAGE |
|------------------------|-----------|----------------------|--------------------------------|---------------|
| DC (V)                 | TOLERANCE | (MΩ)                 | (V)                            | (W)           |
| 430                    | ± 10 %    | >10                  | 710                            | 0.6           |

**TABLE IV. SURGE IMMUNITY FOR THE ASSEMBLY (TERMINALS 1-3) @ 20°C:**

| Parameter          | VOLTAGE – Open Circuit |               | CURRENT – Short Circuit |               | Repetitions    |
|--------------------|------------------------|---------------|-------------------------|---------------|----------------|
|                    | Voltage (V)            | Waveform (μs) | Current (A)             | Waveform (μs) |                |
| IEC / EN 61000-4-5 | 2000                   | 1.2 x 50      | 100                     | 8 x 20        | 5 ea. Polarity |

**TABLE V. APPLICABLE PART DESCRIPTIONS:**

| PART DESCRIPTION | PACKAGING | NOTES |
|------------------|-----------|-------|
| LVM2P-035R14431  | Bulk      | N/A   |

Agency Recognitions: N/A

Reference Documents: PS300 for PPTC section

Precedence: This specification takes precedence over documents referenced herein.

Effectivity: Reference documents shall be the issue in effect on the date of invitation for bid.

CAUTION: Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

### Materials Information

**ROHS Compliant**

 Directive 2002/95/EC  
Compliant

**ELV Compliant**

 Directive 2000/53/EC  
Compliant

**Pb-Free**

**Halogen Free\***


\* Halogen Free refers to: Br≤900ppm, Cl≤900ppm, Br+Cl≤1500ppm.

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