

# Metal Oxide Film Resistors

(Flame proof construction UL-1412)



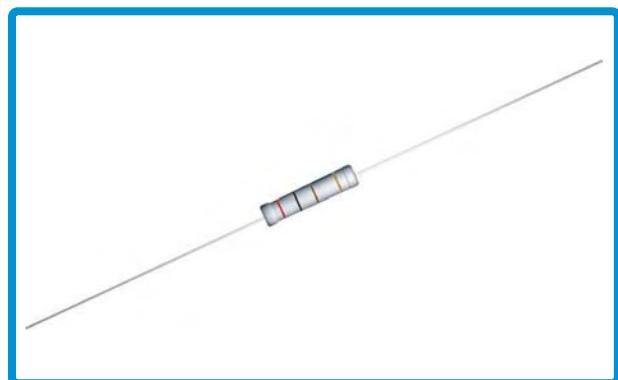
MO Series

MERITEK

## PART NUMBERING SYSTEMS

|   |       |       |      |     |    |    |
|---|-------|-------|------|-----|----|----|
| Meritek Series  | MO    | 1W    | -    | 103 | J  | TR |
| Power Rating  |       |       |      |     |    |    |
| CODE  | 1/4W  | 1/2WS | 1/2W | 1W  | 2W | 3W |
|   |       |       |      |     |    |    |
|   | 0.25W | 0.5W  | 0.5W | 1W  | 2W | 3W |
| Resistance  |       |       |      |     |    |    |
| First 2 digits are significant<br>3rd digit is multiplier<br>"R" indicates decimal value below 10 ohm |       |       |      |     |    |    |
| Tolerance   |       |       |      |     |    |    |
| Code  | J     | G     |      | F   |    |    |
| Tolerance (%)   | ± 5   | ± 2   |      | ± 1 |    |    |
| TR: Tape & Reel<br>B: Bulk  |       |       |      |     |    |    |

Note: "S" in "MOXWS-" denotes small body size



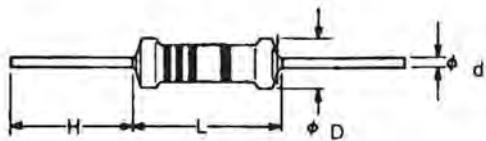
## DIMENSIONS

| Type   |         | Body     |          | Leadwire |          |
|--------|---------|----------|----------|----------|----------|
|        |         | (L)      | (D)      | (H)      | (d±0.03) |
| MO1/4W | MO1/2WS | 6.3±0.5  | 2.3 ±0.3 | 28±2     | 0.55     |
| MO1/2W | MO1WS   | 9.0±0.5  | 3.2 ±0.5 | 26±2     | 0.65     |
| MO1W   | MO2WS   | 11.5±1.0 | 4.5±0.5  | 35±2     | 0.78     |
| MO2W   | MO3WS   | 15.5±1.0 | 5.0±0.5  | 32±2     | 0.78     |
| MO3W   | MO5WS   | 24.5±1.0 | 8.5±0.5  | 32±2     | 0.78     |

## SPECIFICATIONS

| TYPE            | Range<br>±5% | Power<br>Rating | Wvdc<br>(Max) | Overload<br>(Max VDC ) |
|-----------------|--------------|-----------------|---------------|------------------------|
| MO1/4W          | 0.1 to 1M    | 0.25W           | 200           | 350                    |
| MO1/2W, MO1/2WS | 0.1 to 1M    | 0.5W            | 250           | 400                    |
| MO1W, MO1WS     | 0.1 to 1M    | 1W              | 350           | 600                    |
| MO2W, MO2WS     | 0.1 to 1M    | 2W              | 350           | 600                    |
| MO3W, MO3WS     | 0.1 to 1M    | 3W              | 500           | 800                    |
| MO5WS           | 0.22 to 150K | 5W              | 750           | 1000                   |

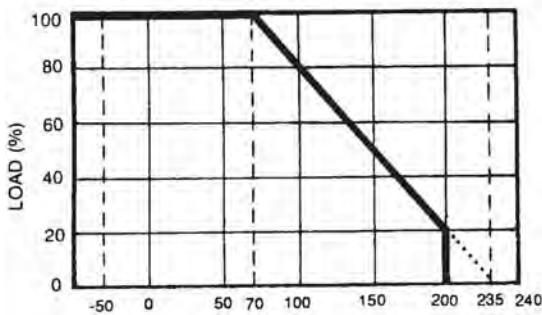
## DIMENSIONS



## CHARACTERISTICS

|                         |              |
|-------------------------|--------------|
| Temperature Coefficient | ±200ppm/°C   |
| Insulation Resistance   | 10,000 M ohm |
| Load Life(1,000 hrs)    | ±3%          |
| Short Time Overload     | ±0.5%        |
| Temperature Cycling     | ±1%          |
| Moisture Resistance     | ±5%          |
| Operating Range         | -55 to 200°C |
| Effect Soldering        | ±0.5%        |

## DERATING CURVE



## SURFACE TEMP RISE

