

## Power Metal Fixed Resistors

### Performance Specification

|                                 |                                                                                                                         |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Short Time Overload             | $\pm(2.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.                                            |
| Dielectric Withstanding Voltage | No evidence of flashover, mechanical damage, arcing or insulation breakdown.                                            |
| Pulse Overload                  | $\pm(5.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.                                            |
| Terminal Strength               | No evidence of mechanical damage.                                                                                       |
| Resistance to Soldering Heat    | $\pm(1.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.                                            |
| Solderability                   | Min. 95% coverage.                                                                                                      |
| Resistance to Solvent           | No deterioration of protective coating and markings.                                                                    |
| Temperature Cycling             | $\pm(2.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.                                            |
| Humidity (Steady state)         | $\pm(2.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.                                            |
| Load Life in Humidity           | <100K $\Omega$ : $\pm(5.0\% + 0.05\Omega)\text{Max}$<br>$\geq 100\text{K}\Omega$ : $\pm(10.0\% + 0.05\Omega)\text{Max}$ |
| Load Life                       | <100K $\Omega$ : $\pm(5.0\% + 0.05\Omega)\text{Max}$<br>$\geq 100\text{K}\Omega$ : $\pm(10.0\% + 0.05\Omega)\text{Max}$ |

### Ordering Procedure: Ex.: PMR 1W-SSS +/-5% 100 $\Omega$ , T/B-1000

| P                          | M | R | 0                        | 1                                                 | T | J                                            | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1 | 0 | 1 | A                                                                                         | 5                                                                                                           | 0                                                                                                                                                                                        |
|----------------------------|---|---|--------------------------|---------------------------------------------------|---|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type:<br>PMR = Power Metal |   |   | Feature:<br>0 = Standard | Wattage:<br>1T = 1W-SSS<br>2S = 2W-S<br>3S = 3W-S |   | Tolerance:<br>G = ±2%<br>J = ±5%<br>K = ±10% | Resistance Value: <ul style="list-style-type: none"><li>E-24 series:<br/>1<sup>st</sup> digit is "0"<br/>2<sup>nd</sup> &amp; 3<sup>rd</sup> digits are significant figures of the resistance<br/>4<sup>th</sup> indicates the number of zeros<br/>"J" ~ 0.1, "K" ~ 0.01<br/>Ex. 4.7Ω ~ 47J, 4.7KΩ ~ 472</li><li>E-96 series:<br/>1<sup>st</sup> to 3<sup>rd</sup> digits are significant figures of the resistance<br/>4<sup>th</sup> digit indicates the number of zeros.<br/>Ex.: 1.33KΩ = 1331</li></ul> |   |   |   | Packing Type:<br>A = Tape/Box<br>T = Tape/Reel<br>B = Bulk/Box<br>P = Tape/Box of PT-26mm | Packing Qty:<br>1 = 1,000 pcs. 2 = 2,000 pcs.<br>5 = 5,000 pcs. A = 500 pcs.<br>B = 2,500 pcs. 0 = Bulk/Box | Additional Information:<br>0 = PT-52mm, PT-26mm,<br>Standard lead wire for Bulk/Box<br>7 = Lead wire (H=38mm)<br>8 = PT-58mm<br>9 = PT-64mm<br>A = PT-83mm<br>C = PT-73mm<br>D = PT-71mm |

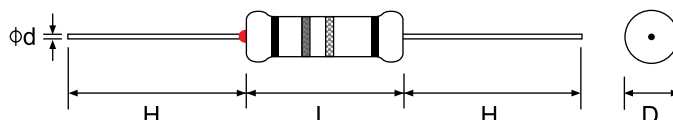
## Power Metal Fixed Resistors

### Features

- High Power, small in dimension
- Stable performance against environment conditions
- Define interruption behavior
- Application: All general purpose power application

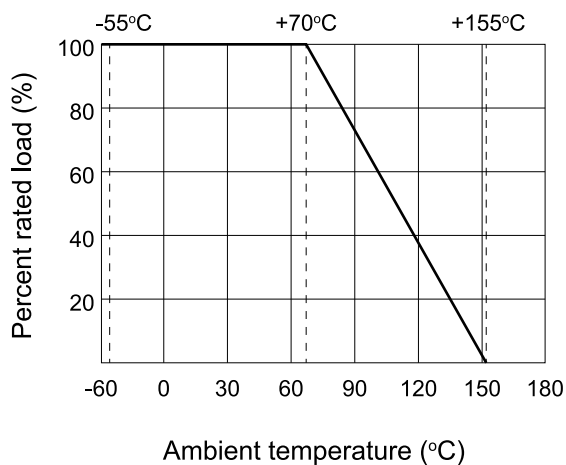


Standard : 2% ,5% ,10% -- E - 24 series

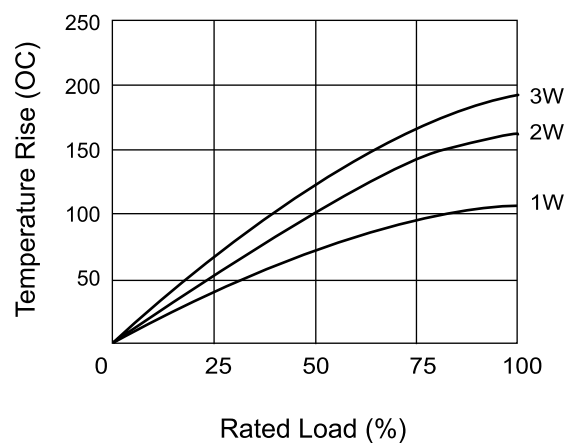


| Part No. | Style       | Power Rating at 70°C | Dimension (mm) |       |     |        |    | Max Working Voltage | Max Overload Voltage | Dielectric Withstanding Voltage | Resistance Range | TCR (PPM/C) | Std Packing Qty |
|----------|-------------|----------------------|----------------|-------|-----|--------|----|---------------------|----------------------|---------------------------------|------------------|-------------|-----------------|
|          |             |                      | D Max          | L Max | H±3 | d±0.05 | PT |                     |                      |                                 |                  |             |                 |
| PMR01T   | PMR 1W -SSS | R<1Ω(0.6W)           | 2.5            | 6.5   | 25  | 0.54   | 52 | 350V                | 400V                 | 350V                            | 0.56Ω~100KΩ      | ±350        | 5,000           |
|          |             | 101KΩ~470KΩ          |                |       |     |        |    |                     |                      |                                 | ±400             |             |                 |
|          |             | 471KΩ~1MΩ            |                |       |     |        |    |                     |                      |                                 | ±800             |             |                 |
| PMR02S   | PMR 2W-S    | 2W                   | 4.0            | 11.0  | 25  | 0.75   | 52 | 500V                | 600V                 | 350V                            | 3.9Ω~100KΩ       | ±350        | 1,000           |
|          |             |                      |                |       |     |        |    |                     |                      |                                 | 101KΩ~680KΩ      | ±400        |                 |
| PMR03S   | PMR 3W-S    | 3W                   | 5.5            | 16.0  | 25  | 0.75   | 64 | 750V                | 800V                 | 350V                            | 12Ω~100KΩ        | ±350        | 1,000           |
|          |             |                      |                |       |     |        |    |                     |                      |                                 | 101KΩ~180KΩ      | ±400        |                 |

Derating Curve



Heat Rise Chart



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Royalohm:

|                                       |                                       |                                       |                                       |                                       |
|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| <a href="#"><u>PRM05WJW10KB00</u></a> | <a href="#"><u>PRM07WJW100B00</u></a> | <a href="#"><u>PRM05WJP471B00</u></a> | <a href="#"><u>PRM05WJP562B00</u></a> | <a href="#"><u>PRM0AWJW10JB00</u></a> |
| <a href="#"><u>PRM05WJP202B00</u></a> | <a href="#"><u>PRM07WJP102B00</u></a> | <a href="#"><u>PRM07WJW200B00</u></a> | <a href="#"><u>PRM0AWJP202B00</u></a> | <a href="#"><u>PRM0AWJW68JB00</u></a> |
| <a href="#"><u>PRM05WJP273B00</u></a> | <a href="#"><u>PRM07WJP104B00</u></a> | <a href="#"><u>PRM07WJW150B00</u></a> | <a href="#"><u>PRM0AWJW100B00</u></a> | <a href="#"><u>PRM0AWJW200B00</u></a> |
| <a href="#"><u>PRM07WJP103B00</u></a> | <a href="#"><u>PRM0AWJW181B00</u></a> | <a href="#"><u>PRM0AWJW22JB00</u></a> | <a href="#"><u>PRM05WJP333B00</u></a> | <a href="#"><u>PRM05WJP680B00</u></a> |
| <a href="#"><u>PRM07WJW151B00</u></a> | <a href="#"><u>PRM0AWJW68KB00</u></a> | <a href="#"><u>PRM07WJW10KB00</u></a> | <a href="#"><u>PRM07WJW47JB00</u></a> | <a href="#"><u>PRM07WJW681B00</u></a> |
| <a href="#"><u>PRM05WJW100B00</u></a> | <a href="#"><u>PRM05WJW30JB00</u></a> | <a href="#"><u>PRM07WJW47KB00</u></a> | <a href="#"><u>PRM05WJP473B00</u></a> | <a href="#"><u>PRM05WJW68JB00</u></a> |
| <a href="#"><u>PRM0AWJW150B00</u></a> | <a href="#"><u>PRM05WJW10JB00</u></a> | <a href="#"><u>PRM07WJP473B00</u></a> | <a href="#"><u>PRM07WJW101B00</u></a> | <a href="#"><u>PRM07WJW30KB00</u></a> |
| <a href="#"><u>PRM0AWJW151B00</u></a> | <a href="#"><u>PRM05WJW470B00</u></a> | <a href="#"><u>PRM05WJW47KB00</u></a> | <a href="#"><u>PRM07WJW30JB00</u></a> | <a href="#"><u>PRM05WJP104B00</u></a> |
| <a href="#"><u>PRM0AWJW30JB00</u></a> | <a href="#"><u>PRM05WJP203B00</u></a> | <a href="#"><u>PRM05WJP750B00</u></a> | <a href="#"><u>PRM0AWJW681B00</u></a> | <a href="#"><u>PRM0AWJW470B00</u></a> |
| <a href="#"><u>PRM0AWJW47KB00</u></a> | <a href="#"><u>PRM05WJP201B00</u></a> | <a href="#"><u>PRM05WJW150B00</u></a> | <a href="#"><u>PRM07WJW68KB00</u></a> | <a href="#"><u>PRM0AWJP102B00</u></a> |
| <a href="#"><u>PRM0AWJW47JB00</u></a> | <a href="#"><u>PRM05WJP472B00</u></a> | <a href="#"><u>PRM05WJW51JB00</u></a> | <a href="#"><u>PRM07WJW470B00</u></a> | <a href="#"><u>PRM05WJP102B00</u></a> |
| <a href="#"><u>PRM05WJW330B00</u></a> | <a href="#"><u>PRM07WJW22JB00</u></a> | <a href="#"><u>PRM07WJW271B00</u></a> | <a href="#"><u>PRM0AWJW10KB00</u></a> | <a href="#"><u>PRM05WJP101B00</u></a> |
| <a href="#"><u>PRM05WJW30KB00</u></a> | <a href="#"><u>PRM0AWJP472B00</u></a> | <a href="#"><u>PRM0AWJW201B00</u></a> | <a href="#"><u>PRM05WJW22KB00</u></a> | <a href="#"><u>PRM07WJP202B00</u></a> |
| <a href="#"><u>PRM0AWJW101B00</u></a> | <a href="#"><u>PRM05WJP681B00</u></a> | <a href="#"><u>PRM05WJW22JB00</u></a> | <a href="#"><u>PRM07WJW68JB00</u></a> | <a href="#"><u>PRM0AWJW750B00</u></a> |
| <a href="#"><u>PRM05WJP103B00</u></a> | <a href="#"><u>PRM05WJP151B00</u></a> | <a href="#"><u>PRM05WJW200B00</u></a> | <a href="#"><u>PRM07WJW10JB00</u></a> | <a href="#"><u>PRM07WJW750B00</u></a> |
| <a href="#"><u>PRM0AWJP103B00</u></a> | <a href="#"><u>PRM0AWJW22KB00</u></a> |                                       |                                       |                                       |