



**THE DATASHEET OF
PMR18EZPFU6L00**



●Features

- 1) Ultra low-ohmic resistance range (1mΩ ~)
- 2) Improved current detection accuracy by trimming-less structure.
- 3) Special low resistance temperature coefficient.
- 4) The unique chip structure minimizes thermal stress during temperature cycling, resulting in greater reliability.
- 5) ROHM resistors have obtained ISO9001 / IAFT16949 certification.
- 6) Corresponds to AEC-Q200.



●Products list

| Part No. | Type code | | Rated power (70°C) (W) | Temperature coefficient (ppm/ °C) | Resistance tolerance (%) | Resistance range (Ω) | Operating temperature range (°C) | Automotive Grade Available (AEC-Q200) |
|----------|-----------|--------|------------------------------|-----------------------------------------|--------------------------------|----------------------------|----------------------------------------|---------------------------------------------|
| | (mm) | (inch) | | | | | | |
| PMR01 | 1005 | 0402 | 0.2 | 0~+200 | J (±5%) | 10 | -55 ~ +155 | Yes |
| PMR03 | 1608 | 0603 | 0.25 | 0~+150 | F (±1%) | 10 | -55 ~ +155 | Yes |
| | | | | | J (±5%) | | | |
| PMR10 | 2012 | 0805 | 0.5 | ±150 | F (±1%) | 2,3,4,5,6,7,8,9,10 | -55 ~ +155 | Yes |
| | | | | | G (±2%) | | | |
| | | | | | J (±5%) | | | |
| PMR18 | 3216 | 1206 | 1 | ±100 | F (±1%) | 1,2,3,4,5,6,7,8,9,10 | -55 ~ +155 | Yes |
| | | | | | J (±5%) | | | |
| PMR25 | 3225 | 1210 | 1 | ±100 | F (±1%) | 1,2,3,4,5 | -55 ~ +155 | Yes |
| | | | | | J (±5%) | | | |
| PMR50 | 5025 | 2010 | 1 | ±100 | F (±1%) | 1,2,3,4,5,6,7,8,9,10 | -55 ~ +155 | Yes |
| | | | | | J (±5%) | | | |
| PMR100 | 6432 | 2512 | 2 | ±100* | F (±1%) | 1,2,3,4,5,6,7,8,9,10 | -55 ~ +155 | Yes |
| | | | | | J (±5%) | | | |

* ±150ppm/ (1mΩ, 2mΩ Only)

* Design and specifications are subject to change without notice.

Carefully check the specification sheet supplied with the product before using or ordering it.

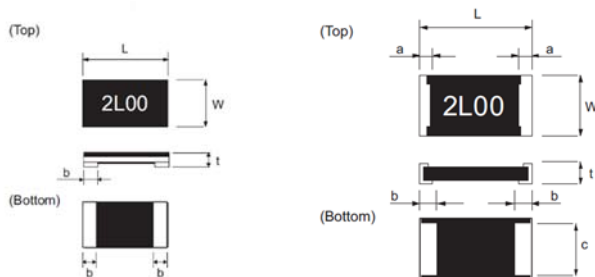
●Part Number Description

| PMR | 25 | HZP | J | V | 2L0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--|--|--|----------|------|--------------------------|-----------------|-------|-----|---------------------------|--------|-------|-----|------------------------|-------|-------|-----|------------------------|-------|-------|-----|------------------------|-------|-------|-----|---------------------------|-------|-------|-----|---------------------------|-------|--------|-----|---------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|---------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------|----------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|--|---------------------------------|--|--|------------------|----------------------|--|--|---|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|------|-----|------|
| <table border="1"> <tr><th>Part No.</th></tr> <tr><td>PMR (Metal plate shunt resistors ultra low ohmic)</td></tr> </table> | Part No. | PMR (Metal plate shunt resistors ultra low ohmic) | <table border="1"> <tr><th>Size (mm)[inch]</th></tr> <tr><td>01 (1005 [0402])</td></tr> <tr><td>03 (1608 [0603])</td></tr> <tr><td>10 (2012 [0805])</td></tr> <tr><td>18 (3216 [1206])</td></tr> <tr><td>25 (3225 [1210])</td></tr> <tr><td>50 (5025 [2010])</td></tr> <tr><td>100 (6432 [2512])</td></tr> </table> | Size (mm)[inch] | 01 (1005 [0402]) | 03 (1608 [0603]) | 10 (2012 [0805]) | 18 (3216 [1206]) | 25 (3225 [1210]) | 50 (5025 [2010]) | 100 (6432 [2512]) | <table border="1"> <tr><th colspan="4">Packaging specifications code</th></tr> <tr> <th>Part No.</th> <th>Code</th> <th>Packaging specifications</th> <th>Quantity / Reel</th> </tr> <tr> <td>PMR01</td> <td>ZZP</td> <td>Embossed tape (2mm pitch)</td> <td>10,000</td> </tr> <tr> <td>PMR03</td> <td>EZP</td> <td>Paper tape (4mm pitch)</td> <td>5,000</td> </tr> <tr> <td>PMR10</td> <td>EZP</td> <td>Paper tape (4mm pitch)</td> <td>5,000</td> </tr> <tr> <td>PMR18</td> <td>EZP</td> <td>Paper tape (4mm pitch)</td> <td>5,000</td> </tr> <tr> <td>PMR25</td> <td>HZP</td> <td>Embossed tape (4mm pitch)</td> <td>2,000</td> </tr> <tr> <td>PMR50</td> <td>HZP</td> <td>Embossed tape (4mm pitch)</td> <td>2,000</td> </tr> <tr> <td>PMR100</td> <td>HZP</td> <td>Embossed tape (4mm pitch)</td> <td>2,000</td> </tr> </table> | Packaging specifications code | | | | Part No. | Code | Packaging specifications | Quantity / Reel | PMR01 | ZZP | Embossed tape (2mm pitch) | 10,000 | PMR03 | EZP | Paper tape (4mm pitch) | 5,000 | PMR10 | EZP | Paper tape (4mm pitch) | 5,000 | PMR18 | EZP | Paper tape (4mm pitch) | 5,000 | PMR25 | HZP | Embossed tape (4mm pitch) | 2,000 | PMR50 | HZP | Embossed tape (4mm pitch) | 2,000 | PMR100 | HZP | Embossed tape (4mm pitch) | 2,000 | <table border="1"> <tr><th>Resistance tolerance</th></tr> <tr><td>F (±1%)</td></tr> <tr><td>G (±2%)</td></tr> <tr><td>J (±5%)</td></tr> </table> | Resistance tolerance | F (±1%) | G (±2%) | J (±5%) | <table border="1"> <tr><th>Resistance tolerance</th></tr> <tr><td>U: 5m~10m</td></tr> <tr><td>V: 1m~4m</td></tr> <tr><td>(Ω)</td></tr> </table> | Resistance tolerance | U: 5m~10m | V: 1m~4m | (Ω) | <table border="1"> <tr><th colspan="3">Nominal resistance</th></tr> <tr><td colspan="3">Resistance code, 3 or 4 digits.</td></tr> <tr> <th>Resistance value</th> <th colspan="2">Resistance tolerance</th> </tr> <tr> <td></td> <th>J</th> <th>F, G</th> </tr> <tr><td>1mΩ</td><td>1L0</td><td>1L00</td></tr> <tr><td>2mΩ</td><td>2L0</td><td>2L00</td></tr> <tr><td>3mΩ</td><td>3L0</td><td>3L00</td></tr> <tr><td>4mΩ</td><td>4L0</td><td>4L00</td></tr> <tr><td>5mΩ</td><td>5L0</td><td>5L00</td></tr> <tr><td>6mΩ</td><td>6L0</td><td>6L00</td></tr> <tr><td>7mΩ</td><td>7L0</td><td>7L00</td></tr> <tr><td>8mΩ</td><td>8L0</td><td>8L00</td></tr> <tr><td>9mΩ</td><td>9L0</td><td>9L00</td></tr> <tr><td>10mΩ</td><td>10L</td><td>10L0</td></tr> </table> | Nominal resistance | | | Resistance code, 3 or 4 digits. | | | Resistance value | Resistance tolerance | | | J | F, G | 1mΩ | 1L0 | 1L00 | 2mΩ | 2L0 | 2L00 | 3mΩ | 3L0 | 3L00 | 4mΩ | 4L0 | 4L00 | 5mΩ | 5L0 | 5L00 | 6mΩ | 6L0 | 6L00 | 7mΩ | 7L0 | 7L00 | 8mΩ | 8L0 | 8L00 | 9mΩ | 9L0 | 9L00 | 10mΩ | 10L | 10L0 |
| Part No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PMR (Metal plate shunt resistors ultra low ohmic) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Size (mm)[inch] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 01 (1005 [0402]) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 03 (1608 [0603]) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 (2012 [0805]) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 (3216 [1206]) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 (3225 [1210]) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 (5025 [2010]) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 (6432 [2512]) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Packaging specifications code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part No. | Code | Packaging specifications | Quantity / Reel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PMR01 | ZZP | Embossed tape (2mm pitch) | 10,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PMR03 | EZP | Paper tape (4mm pitch) | 5,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PMR10 | EZP | Paper tape (4mm pitch) | 5,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PMR18 | EZP | Paper tape (4mm pitch) | 5,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PMR25 | HZP | Embossed tape (4mm pitch) | 2,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PMR50 | HZP | Embossed tape (4mm pitch) | 2,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PMR100 | HZP | Embossed tape (4mm pitch) | 2,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Resistance tolerance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F (±1%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G (±2%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| J (±5%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Resistance tolerance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U: 5m~10m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V: 1m~4m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (Ω) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nominal resistance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Resistance code, 3 or 4 digits. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Resistance value | Resistance tolerance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | J | F, G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1mΩ | 1L0 | 1L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2mΩ | 2L0 | 2L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3mΩ | 3L0 | 3L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4mΩ | 4L0 | 4L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5mΩ | 5L0 | 5L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6mΩ | 6L0 | 6L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7mΩ | 7L0 | 7L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8mΩ | 8L0 | 8L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9mΩ | 9L0 | 9L00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10mΩ | 10L | 10L0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

●Chip resistor dimensions and markings

■PMR 01 / 03 / 10 / 18

■PMR 25 / 50 / 100



<Marking method>

There are four digits used for the calculation number "L" is used for the decimal point of mΩ.
 Ex.) 2mΩ = 2L00
 10mΩ = 10L0

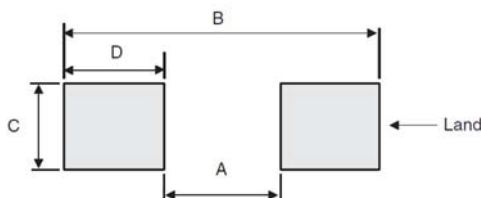
*PMR01/03 are NO marking

(Unit : mm)

| Part No. | (mm) | (inch) | L | W | t | a | b | c | Marking existence |
|----------|------|--------|-----------|-----------|-----------------|-----------|-----------------|-----------|-------------------|
| PMR01 | 1005 | 0402 | 1.00±0.05 | 0.50±0.05 | 0.25±0.10 | — | 0.25±0.10 | — | No |
| PMR03 | 1608 | 0603 | 1.60±0.15 | 0.80±0.15 | 0.25±0.10 | — | 0.35±0.15 | — | No |
| PMR10 | 2012 | 0805 | 2.00±0.15 | 1.20±0.15 | 0.42~0.28*±0.15 | — | 0.75~0.35*±0.25 | — | Yes |
| PMR18 | 3216 | 1206 | 3.20±0.15 | 1.60±0.15 | 0.44~0.28*±0.15 | — | 1.20~0.50*±0.25 | — | Yes |
| PMR25 | 3225 | 1210 | 3.20±0.20 | 2.50±0.20 | 0.52~0.32*±0.15 | 0.50±0.20 | 1.00~0.80*±0.20 | 1.95±0.20 | Yes |
| PMR50 | 5025 | 2010 | 5.00±0.20 | 2.50±0.20 | 0.52~0.32*±0.15 | 0.50±0.20 | 1.85~0.90*±0.20 | 1.95±0.20 | Yes |
| PMR100 | 6432 | 2512 | 6.40±0.25 | 3.20±0.25 | 0.52~0.32*±0.15 | 0.50±0.25 | 2.30~1.10*±0.25 | 2.65±0.25 | Yes |

* Each value range varies with the resistance. Please contact a ROHM sales representative for further details.

●Land pattern example



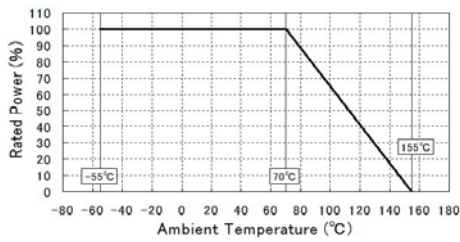
(Unit : mm)

| Dimensions Part No. | A | B | C | D |
|---------------------|-----|-----|-----|------|
| PMR01 | 0.5 | 1.8 | 0.5 | 0.65 |
| PMR03 | 0.5 | 2.5 | 0.9 | 1.0 |
| PMR10 | 0.8 | 3.4 | 1.3 | 1.3 |
| PMR18 | 0.6 | 4.0 | 1.8 | 1.7 |
| PMR25 | 1.0 | 4.0 | 2.8 | 1.5 |
| PMR50 | 1.8 | 6 | 2.8 | 2.1 |
| PMR100 | 1.2 | 6.8 | 3.4 | 2.8 |

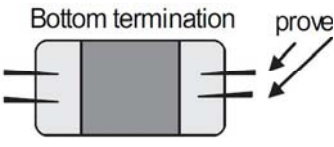
●Derating curve

When the ambient temperature exceeds 70°C, power dissipation must be adjusted according to the derating curve below.

■PMR 01 / 03 / 10 / 18 / 25 / 50 / 100



●Characteristics

| Test items | Guaranteed value | Test conditions |
|------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resistance | See P.1 | 20°C Measuring method : Measuring under termination by 4 probes.  |
| Variation of resistance with temperature | See P.1 | Measurement : +25/-55, +25/+125°C (PMR18: +25/+125°C) |
| Overload | ±2.0% | Rated power×2.5, 2s |
| Solderability | A new uniform coating of minimum of 95% of the surface being immersed and no soldering damage. | Rosin-ethanol solution(25% mass) Soldering condition : 245±5°C Duration of immersion : 2.0±0.5s |
| Resistance to soldering heat | ±1.0% No remarkable abnormality on the appearance. | Soldering condition : 260±5°C Duration of immersion : 10±1s |
| Rapid change of temperature | ±1.0% | Test temp : -55°C~+125°C 5cycles |
| Damp heat, steady state | ±3.0% | 40°C, 93%(Relative humidity) Test time : 1,000h |
| Endurance at 70°C | ±3.0% | 70°C, Rated power 1.5h:ON – 0.5h:OFF Test time : 1,000h |
| Endurance | ±3.0% | 155°C Test time : 1,000h |
| Resistance to solvent | ±0.5% | 23±5°C, Immersion cleaning, 5±0.5min Solvent: 2-propanol |
| Bend strength of the end face plating | Without open. | - |

Compliance Standard(s) : IEC60115-8
JIS C 5201-1

●Tape dimensions

■Paper tape

(Unit : mm)



| Part No. | W | F | E | A0 | B0 |
|----------|---------|----------|----------|-------------------|-------------------|
| PMR03 | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 0.95±0.1 | 1.75±0.1 |
| PMR10 | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 1.45+0.2 -0.1 | 2.3+0.2 -0.1 |
| PMR18 | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 1.95+0.1 -0.05 | 3.5+0.15 -0.05 |

| Part No. | D0 | P0 | P1 | P2 | T2 |
|----------|---------------|---------|---------|----------|--------|
| PMR03 | Φ1.5+0.1 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | MAX1.1 |
| PMR10 | Φ1.5+0.1 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | MAX1.1 |
| PMR18 | Φ1.5+0.1 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | MAX1.1 |

■Embossed tape

(Unit : mm)



| Part No. | W | F | E | A0 | B0 |
|----------|----------|----------|----------|-----------|-----------|
| PMR01 | 8.0±0.1 | 3.5±0.05 | 1.75±0.1 | 0.68±0.03 | 1.12±0.03 |
| PMR25 | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 3.0±0.1 | 3.5±0.1 |
| PMR50 | 12.0±0.3 | 5.5±0.05 | 1.75±0.1 | 2.9±0.2 | 5.3±0.2 |
| PMR100 | 12.0±0.3 | 5.5±0.05 | 1.75±0.1 | 3.5±0.2 | 6.7±0.2 |

| Part No. | D0 | P0 | P1 | P2 | T2 |
|----------|---------------|----------|----------|----------|--------|
| PMR01 | Φ1.5+0.1 0 | 4.0±0.05 | 2.0±0.05 | 2.0±0.05 | MAX1.1 |
| PMR25 | Φ1.5+0.1 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | MAX1.1 |
| PMR50 | Φ1.5+0.1 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | MAX1.1 |
| PMR100 | Φ1.5+0.1 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | MAX1.1 |

●Reel dimensions

Using two kinds of reels for taping.



(Unit : mm)

| Part No. | A | B | C | D |
|----------|----------------|---------------|--------------|---------|
| PMR01 | Φ180 0 -1.5 | Φ60 +1.0 0 | 9 +1.0 0 | Φ13±0.2 |
| PMR03 | | | | |
| PMR10 | | | | |
| PMR18 | | | | |
| PMR25 | | | 13 +1.0 0 | |
| PMR50 | | | | |
| PMR100 | | | | |

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(Note1) Medical Equipment Classification of the Specific Applications

| JAPAN | USA | EU | CHINA |
|-----------|-----------|------------|-----------|
| CLASS III | CLASS III | CLASS II b | CLASS III |
| CLASS IV | | CLASS III | |

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 - Use of our Products in places where the Products are exposed to static electricity or electromagnetic waves
 - Use of our Products in proximity to heat-producing components, plastic cords, or other flammable items
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 - Use of our Products without cleaning residue of flux (Exclude cases where no-clean type fluxes is used. However, recommend sufficiently about the residue.) ; or Washing our Products by using water or water-soluble cleaning agents for cleaning residue after soldering
 - Use of the Products in places subject to dew condensation
- The Products are not subject to radiation-proof design.
- Please verify and confirm characteristics of the final or mounted products in using the Products.
- In particular, if a transient load (a large amount of load applied in a short period of time, such as pulse, is applied, confirmation of performance characteristics after on-board mounting is strongly recommended. Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
- De-rate Power Dissipation depending on ambient temperature. When used in sealed area, confirm that it is the use in the range that does not exceed the maximum junction temperature.
- Confirm that operation temperature is within the specified range described in the product specification.
- ROHM shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.

Precaution for Mounting / Circuit board design

- When a highly active halogenous (chlorine, bromine, etc.) flux is used, the residue of flux may negatively affect product performance and reliability.
- In principle, the reflow soldering method must be used on a surface-mount products, the flow soldering method must be used on a through hole mount products. If the flow soldering method is preferred on a surface-mount products, please consult with the ROHM representative in advance.

For details, please refer to ROHM Mounting specification

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This Product is electrostatic sensitive product, which may be damaged due to electrostatic discharge. Please take proper caution in your manufacturing process and storage so that voltage exceeding the Products maximum rating will not be applied to Products. Please take special care under dry condition (e.g. Grounding of human body / equipment / solder iron, isolation from charged objects, setting of Ionizer, friction prevention and temperature / humidity control).

Precaution for Storage / Transportation

1. Product performance and soldered connections may deteriorate if the Products are stored in the places where:
 - [a] the Products are exposed to sea winds or corrosive gases, including Cl₂, H₂S, NH₃, SO₂, and NO₂
 - [b] the temperature or humidity exceeds those recommended by ROHM
 - [c] the Products are exposed to direct sunshine or condensation
 - [d] the Products are exposed to high Electrostatic
2. Even under ROHM recommended storage condition, solderability of products out of recommended storage time period may be degraded. It is strongly recommended to confirm solderability before using Products of which storage time is exceeding the recommended storage time period.
3. Store / transport cartons in the correct direction, which is indicated on a carton with a symbol. Otherwise bent leads may occur due to excessive stress applied when dropping of a carton.
4. Use Products within the specified time after opening a humidity barrier bag. Baking is required before using Products of which storage time is exceeding the recommended storage time period.

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