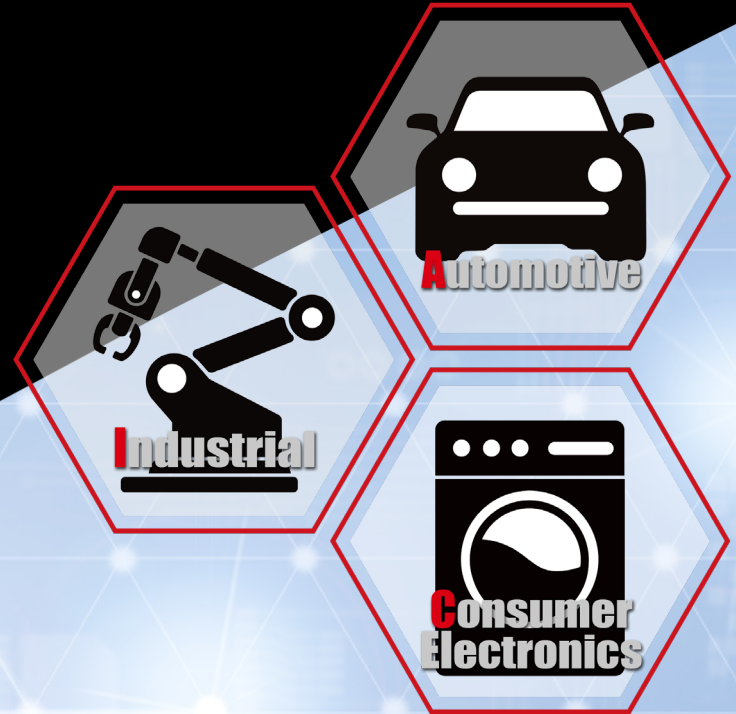


Meets the demand for the miniaturization of high-current detection circuits

Ultra-Low Ohmic (0.5/1/1.5m Ω)
High Power (5W) Flat Chip Type
6432 size Shunt Resistors

PMR100HQP7

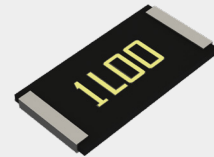


The PMR100HQP7 is a high-power 6432-size (6.4mm × 3.2mm) model within the PMR series – part of ROHM’s standard metal plate shunt resistor lineup. Features such as a compact size, ultra-low resistance, and high-power capability make it possible to meet the need for greater miniaturization of large current detection circuits in automotive and industrial equipment applications.

Features

- **Achieves a rated power of 5W and rated terminal temperature of 130°C (0.5/1mΩ models)**
Flat chip type with protective film achieves class-leading* rated power in the 6432 size, contributing to application miniaturization
- **Proprietary trimming-less structure ensures a distance of 1.6mm (Typ) or more between electrodes**
Facilitates current detection wiring and pattern design

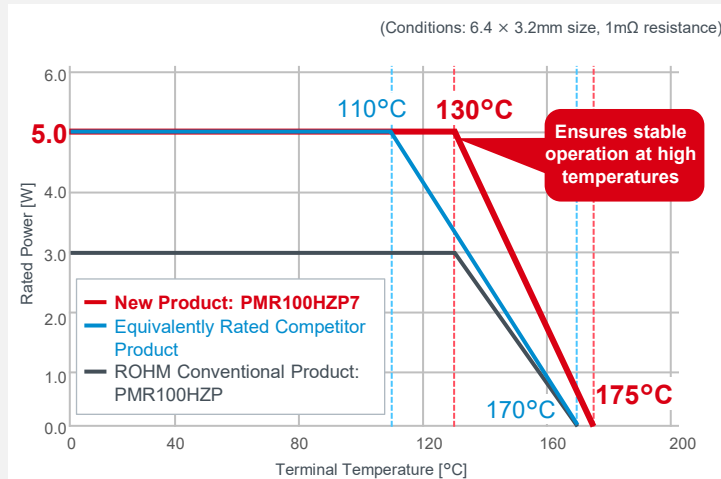
* ROHM March 2024 study



PMR100HQP7
6432 (2512)

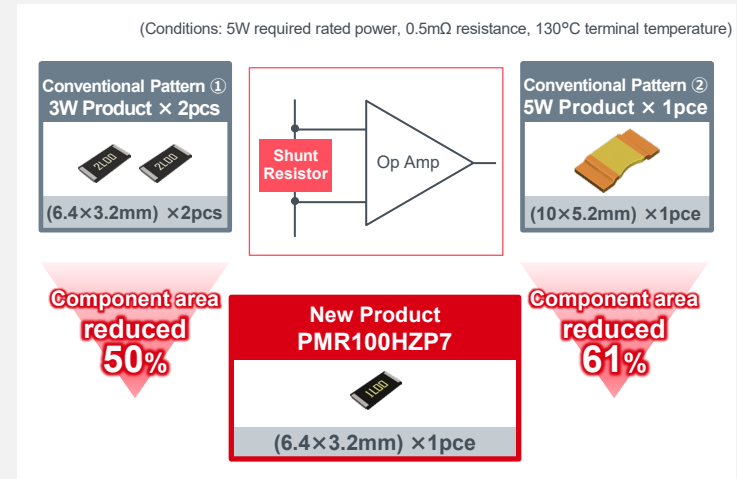
unit: mm (inch)

Rated Power Comparison



Flat chip type with protective film achieves class-leading* rated power of 5W in the 6432 size

Comparison of Current Detection Circuit Area

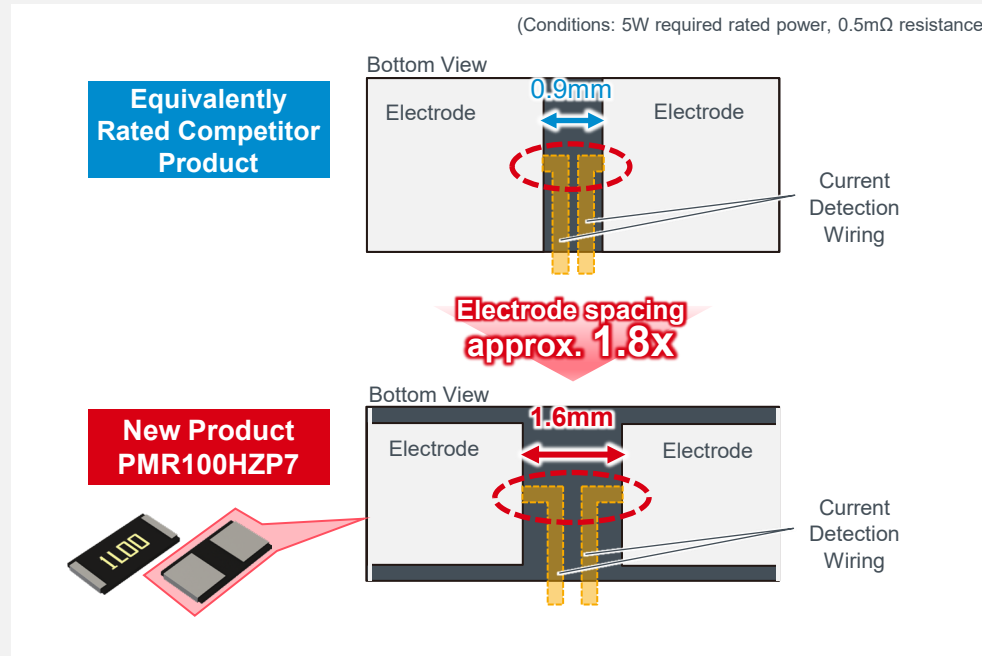


Contributes to application miniaturization

* ROHM March 2024 study

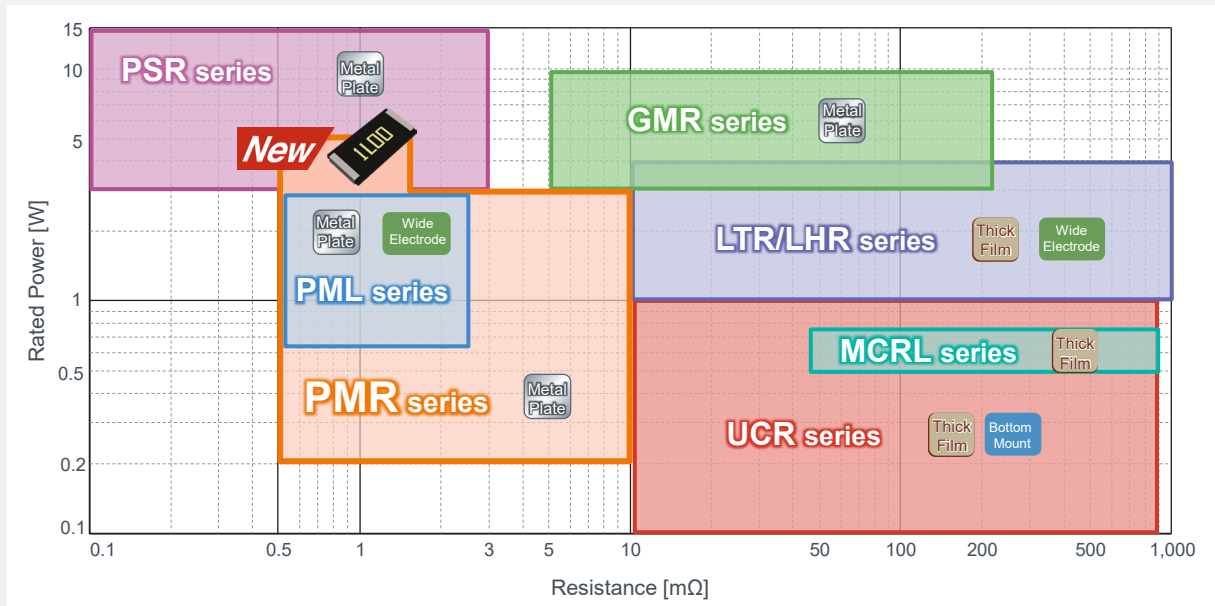
Proprietary Trimming-less Structure Ensures a Distance of 1.6mm (Typ) or More Between Electrodes

Comparison of Electrode Distance: vs Equivalently Rated Competitor Product

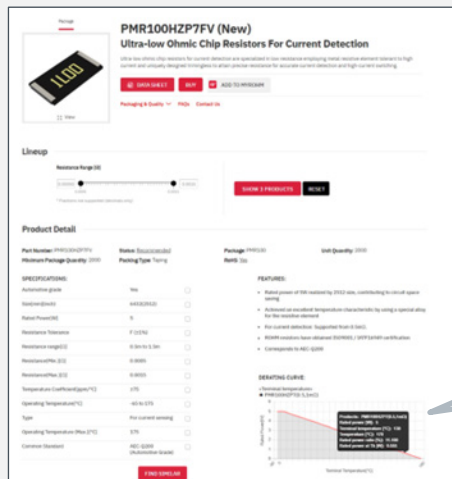


Facilitates current detection wiring and pattern design

ROHM Shunt Resistor series Chart

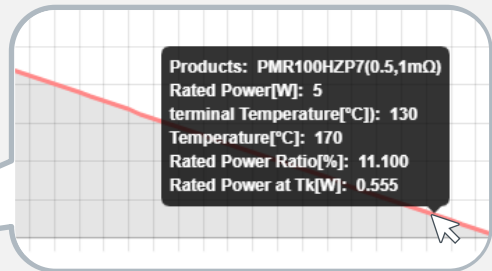


*Click on the series name in the table to access the product page on ROHM's website.



New Product: PMR100HZP7FV

Hover the cursor to display the actual performance values at any ambient/terminal temperature



Applicable part numbers are being added
PMR series of Ultra-Low Ohmic Resistors

Application Examples

• Automotive Systems

EPS, electric compressors, pumps, door motors, ADAS controllers, etc.

















• Industrial Equipment



Industrial power modules, power conditioners, power tools, server/base station power supplies, etc.

• Consumer Devices

Home appliances (e.g. air conditioners, vacuum cleaners, refrigerators) etc.

Ultra-Low Ohmic Metal Plate Shunt Resistors: PMR series

Part No.	Size Code [mm] (inch)	Rated Power [W]	Resistance [mΩ]	Rated Ambient Temp. [°C]	Rated Terminal Temp. [°C]	Resistance Tolerance	Temperature Coefficient of Resistance [ppm/°C]	Operating Temp. [°C]	Automotive-Grade AEC-Q200
PMR01ZZP  	1005 (0402)	0.2	10	70	—	J (±5%)	0 to 200	-55 to +155	YES
PMR03EZP  	1608 (0603)	0.25	10	70	—	F (±1%) J (±5%)	0 to 150	-55 to +155	YES
PMR10EZP  	2012 (0805)	1	2	—	130	F (±1%) J (±5%)	±100	-65 to +155	YES
		0.5	3, 4, 5, 6, 7, 8, 9, 10	70	—		±150	-55 to +155	
PMR18EZP  	3216 (1206)	1.5	1, 2	—	130	F (±1%) J (±5%)	±100	-65 to +155	YES
		1	3, 4, 5, 6, 7, 8, 9, 10	70	—			-55 to +155	
PMR25HZP  	3225 (1210)	2	1	—	130	F (±1%) J (±5%)	±75	-65 to +175	YES
		1	2, 3, 4, 5	70	—		±100	-55 to +155	
PMR50HZP  	5025 (2010)	2	1, 2	—	130	F (±1%) J (±5%)	±75	-65 to +175	YES
		1	3, 4, 5, 6, 7, 8, 9, 10	70	—		±100	-55 to +155	
New PMR100HZP7  	6432 (2512)	5	0.5, 1	—	130	F (±1%)	±75	-65 to +175	YES
			1.5		125				
PMR100HZP  	6432 (2512)	3	1.2	—	130	F (±1%) J (±5%)	±75	-65 to +175	YES
		2	3, 4, 5, 6, 7, 8, 9, 10	70	—	F (±1%) J (±5%)	±100	-55 to +155	

Click on the  icon to access the product page and the  icon to view the datasheet on ROHM's website.

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