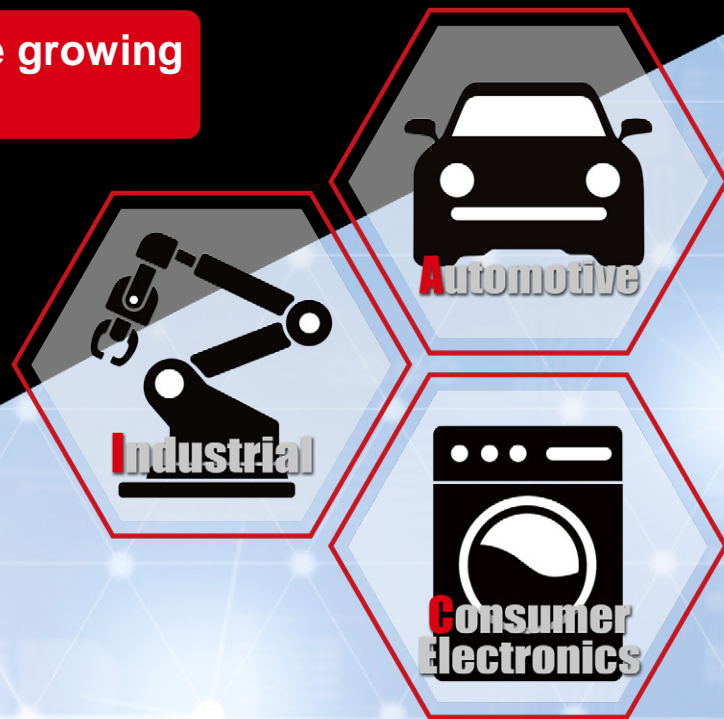


New lineups support long-term supply to meet the growing demand in a variety of fields

General Purpose Chip Resistors: MCRS/MCRL series*

*Qualified AEC-Q200; compliant with the ISO9001/IATF16949 international certification standards

MCRxxS/MCRxxL



The MCRS/MCRL series are new general-purpose chip resistors. Expanding production capacity through planned capital investments and setting a supply period of over 20 years will allow ROHM to ensure stable supply in automotive and other fields.

Features

- **Broad range of sizes supports both new and replacement needs**

MCRS series: 1005 to 6432, MCRL series: 2012 to 6432.

Supply volumes will be expanded through planned capital investments.

- **Allows the use of smaller components compared to conventional products**

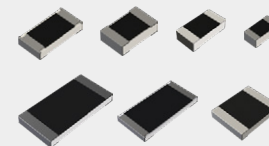
Achieves higher power equivalent to products one size larger.

Reducing size increases the number of chips per reel (i.e. switching from the 1608 size to 1005).

- **Reliable, long-term stable supply**

All resistors are recommended products supported by our 20-year product longevity program.

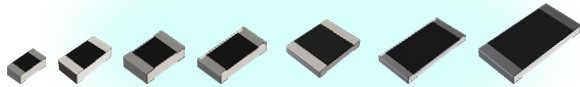
*AEC-Q200 qualified; compliant with the ISO9001/IATF16949 international certification standards



High Power/High Power Low Ohmic Type

MCRS/MCRL series

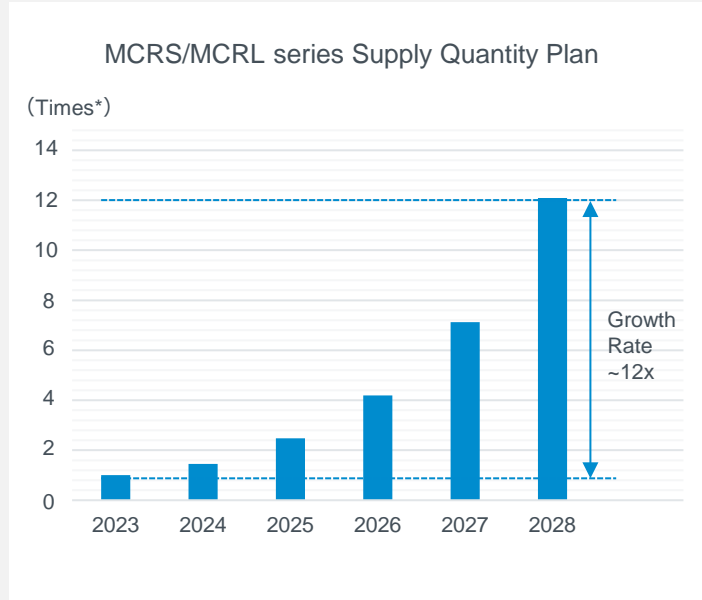
Comprehensive Product Lineup



	MCRS series	MCRL series
Size	1005 to 6432	2012 to 6432
Rated Power	0.1W to 2.0W	0.5W to 3.0W
Resistance Range	1Ω to 10MΩ	47mΩ to 910mΩ

A wide range of sizes is available from low (for current sense) to high resistances

Increased Production Capacity



*Production scale assuming a total volume of MCRS/MCRL series in 2023 as 1

Plans are in place to significantly expand volume by increasing production capacity

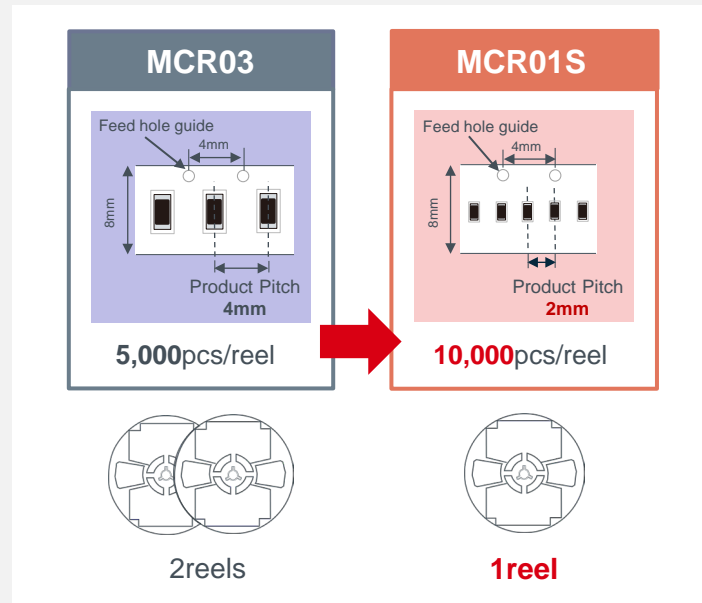
Miniaturization through improved rated power

size [mm] (inch)	Rated Power	
	Previous MCR series	MCRS series
1005 (0402)	0.063W	0.1W
1608 (0603)	0.10W	0.125W
2012 (0805)	0.125W	0.25W
3216 (1206)	0.25W	0.4W
3225 (1210)	0.25W	[0.5W]*
5025 (2010)	0.5W	[1.5W]*
6432 (2512)	1.0W	[2.0W]*

*The rated power indicated in [] represents the guaranteed value based on terminal temperature derating

Higher rated power enables the use of models one size smaller than conventional products

Decreases storage space and reel replacement frequency



Increasing the number of chips per reel cuts reel inventory by half

■ Reliable, Long-Term Stable Supply

Available from 2023

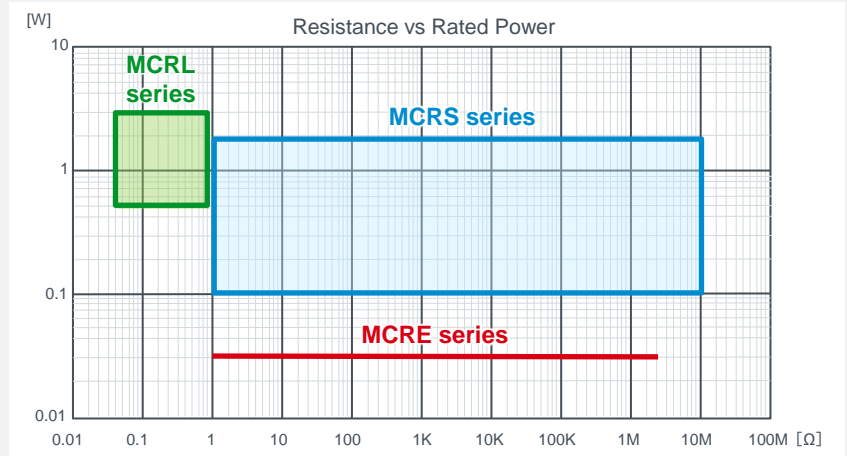
Product Longevity Program (PLP)



Guaranteed supply term of
20 years or more

[Product Longevity
Program](#)

■ Product Range of New General Purpose Chip Resistor Family



[General Purpose Chip Resistors \(MCR series\) Page](#)

High Power Type (General Purpose) Chip Resistors











■ High Power MCRS series



Part No.	size		Rated Power [W]	Rated Ambient Temp. [°C]	Rated Terminal Temp. [°C]	Max Element Voltage [V]	Resistance Range [Ω]	Operating Temp. Range [°C]	Automotive Grade (AEC-Q200)
	[mm]	[inch]							
MCR01S	1005	0402	0.1	70	—	75	1≤R≤10M	-55 to +155	YES
						(Jumper type) Conduction resistance: 50mΩ Max, Rated current: 1.5A			
MCR03S	1608	0603	0.125	70	—	150	1≤R≤10M	-55 to +155	YES
						(Jumper type) Conduction resistance: 50mΩ Max, Rated current: 2A			
MCR10S	2012	0805	0.25	70	—	200	1≤R≤10M	-55 to +155	YES
						(Jumper type) Conduction resistance: 50mΩ Max, Rated current: 2.5A			
MCR18S	3216	1206	0.4	70	—	200	1≤R≤10M	-55 to +155	YES
						(Jumper type) Conduction resistance: 50mΩ Max, Rated current: 2.5A			
New MCR25S	3225	1210	0.5	70	110	200	1≤R≤3.3M	-55 to +155	YES
						(Jumper type) Conduction resistance: 50mΩ Max, Rated current: 2A			
New MCR50S	5025	2010	1.5	70	105	250	1≤R≤4.7M	-55 to +155	YES
						(Jumper type) Conduction resistance: 50mΩ Max, Rated current: 4A			
New MCR100S	6432	2512	2	70	105	250	1≤R≤4.7M	-55 to +155	YES
						(Jumper type) Conduction resistance: 50mΩ Max, Rated current: 4A			

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



Low Ohmic High Power/Completely Pb-Free Type Chip Resistors



■ Low Ohmic High Power MCRL series

Part No.	size		Rated Power [W]	Rated Ambient Temp. [°C]	Rated Terminal Temp. [°C]	Resistance Range [Ω]	Operating Temp. Range [°C]	Automotive Grade (AEC-Q200)
	[mm]	[Inch]						
MCR10L  	2012	0805	0.50	70	—	47m≤R≤910m	-55 to +155	YES
MCR18L  	3216	1206	0.75	70	—	47m≤R≤910m	-55 to +155	YES
New MCR25L  	3225	1210	1.25	70	125	47m≤R≤910m	-55 to +155	YES
New MCR50L  	5025	2010	2	70	125	47m≤R≤910m	-55 to +155	YES
New MCR100L  	6432	2512	3	70	125	47m≤R≤910m	-55 to +155	YES

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

■ Now Available: Completely Pb-Free MCRE series

Part No.	size		Rated Power [W]	Rated Ambient Temp. [°C]	Rated Terminal Temp. [°C]	Max Element Voltage [V]	Resistance Range [Ω]	Operating Temp. Range [°C]	Automotive Grade (AEC-Q200)
	[mm]	[Inch]							
New MCR004E  	0402	01005	0.031 (1/32)	70	—	15	1≤R≤3M	-55 to +125	—
						(Jumper type) Conduction resistance: 50mΩ Max, Rated current: 0.5A			

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

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