



# Eaton advances its low profile inductor offering with MPI(A)25V2



Offering new trends in power magnetics with high power density in a small robust construction design suitable for commercial and automotive applications.

### Product description:

Eaton's electronics division introduces MPI25xxV2 (commercial grade) & MPIA25xxV2 (automotive grade), our latest advancement in power magnetics designed to meet automotive electronics power and thermal handling requirements.

The MPI(A)25 uses an advanced molded construction design for high current handling capabilities, better thermal dissipation characteristics and superior mechanical strength. The MPI(A)25 family has a compact standard 1008 (2520 metric) footprint in 1.0 mm and 1.2 mm height, is magnetically shielded for low EMI, has low core loss and temperature stability over the operating temperature range.

The MPIA25xxV2 is AEC-Q200 Automotive Grade 3 compliant allowing automotive engineers to reduce development time and project costs.

### Features and benefits:

- AEC-Q200 qualified
- High current carrying capacity in a compact standard 1008 (2520 metric) footprint
- Magnetically shielded, Low EMI
- Rugged construction
- Self resonant frequency (SRF) greater than 25 MHz
- Inductance range from 0.33  $\mu\text{H}$  to 4.7  $\mu\text{H}$
- Current range from 1.2 A to 7.5 A
- Low profile package in 1.05 mm, 1.25 mm heights
- Moisture Sensitivity Level (MSL): 1

# EATON

Powering Business Worldwide

## MPI25xxV2 Product specifications

Part Number <sup>5</sup>	OCL <sup>1</sup> ( $\mu$ H) $\pm 20\%$	I <sub>rms</sub> <sup>2</sup> (A)	I <sub>sat</sub> <sup>3</sup> (A)	DCR (m $\Omega$ ) typical @ +20 °C	DCR (m $\Omega$ ) maximum @ +20 °C	SRF (MHz) typical	K-factor <sup>4</sup>
<b>1.0 mm height</b>							
MPI2510V2-R33-R	0.33	4.8	6.6	15	20	120	6336
MPI2510V2-R47-R	0.47	4.4	6.0	19	25	100	5039
MPI2510V2-R68-R	0.68	3.1	4.3	37	44	80	5733
MPI2510V2-1R0-R	1.00	3.1	4.3	41	52	55	3372
MPI2510V2-1R5-R	1.50	2.5	2.5	65	85	45	4695
MPI2510V2-2R2-R	2.20	2.1	2.8	88	110	45	2873
MPI2510V2-3R3-R	3.30	1.6	2.1	140	170	35	1893
MPI2510V2-4R7-R	4.70	1.22	1.8	220	262	25	1616
<b>1.2 mm height</b>							
MPI2512V2-R33-R	0.33	5.1	7.5	14	19	130	6560
MPI2512V2-R47-R	0.47	4.9	6.7	17	23	100	3628
MPI2512V2-R68-R	0.68	3.4	6.0	29	35	70	3633
MPI2512V2-1R0-R	1.00	3.3	4.4	36	44	70	3083
MPI2512V2-1R5-R	1.50	2.3	3.2	64	77	45	4850
MPI2512V2-2R2-R	2.20	2.2	3.5	73	87	30	2924
MPI2512V2-3R3-R	3.30	1.8	2.8	110	135	35	1965
MPI2512V2-4R7-R	4.70	1.4	1.9	196	235	25	1580

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