

NRSA Series

SMD Power Inductors for Automotive Size 5040



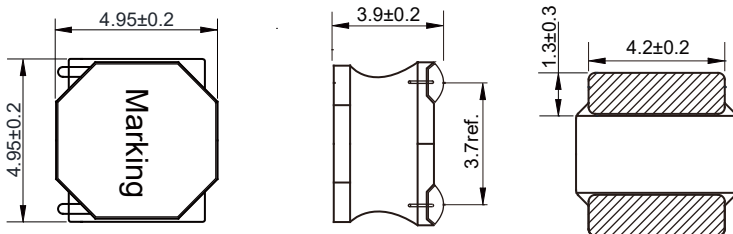
FEATURES

- Magnetic shield type wound inductor for power circuits using a ferrite magnetic material
- High magnetic shield construction and compatible with high-density mounting.
- Larger current and lower Rdc were achieved by optimizing the ferrite core figure.
- Operating temperature: -55 to +125°C (including self-temperature rise)
- High reliability -Reliability test meet AEC-Q200
- Quantity: 1500pcs

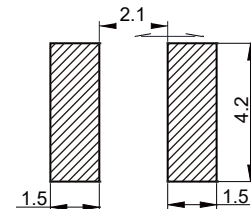
APPLICATION

- Car navigation, car stereo and car accessories only

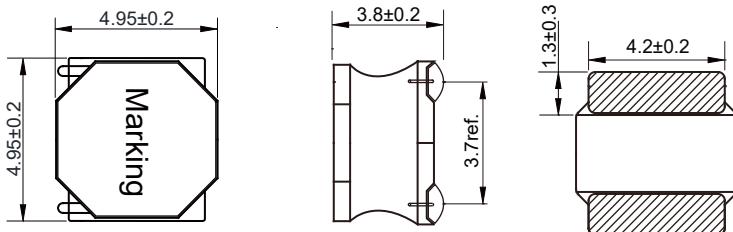
Dimensions: [mm] ≤10μH



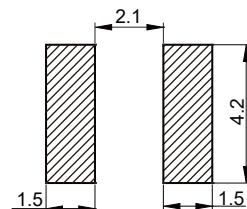
Land Pattern: [mm]



Dimensions: [mm] >10μH



Land Pattern: [mm]



Electrical Properties:

Part No	Inductance @100KHz/1V (μH)	Tolerance	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)	DCR ±20% (mΩ)	Quantity
NRSA5040-1R0M	1.0	±20%	7.50	5.00	12	1500
NRSA5040-1R5M	1.5	±20%	6.50	4.50	15	1500
NRSA5040-2R2M	2.2	±20%	5.70	3.80	21	1500
NRSA5040-3R3M	3.3	±20%	4.40	3.50	24	1500
NRSA5040-4R7M	4.7	±20%	3.90	3.20	32	1500
NRSA5040-6R8M	6.8	±20%	3.30	2.50	43	1500
NRSA5040-100M	10	±20%	2.52	2.20	56	1500

Part No	Inductance @100kHz/1V (μ H)	Tolerance	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)	DCR $\pm 20\%$ (m Ω)	Quantity
NRSA5040-150M	15	$\pm 20\%$	2.00	1.80	80	1500
NRSA5040-220M	22	$\pm 20\%$	1.62	1.50	123	1500
NRSA5040-330M	33	$\pm 20\%$	1.30	1.20	180	1500
NRSA5040-470M	47	$\pm 20\%$	1.10	1.00	270	1500

Operating temperature: -40 to $+125^{\circ}\text{C}$ (including self-temperature rise)

Temperature rising current will cause the coil temperature rise approximately $\Delta t 40^{\circ}\text{C}$

Saturation current will cause L to drop approximately 30% max.

Typical Electrical Characteristics:

