

Wire-Wound Ferrite Power Inductors LAYP series for Automotive Powertrain and Safety

Simple Product Catalog

Part Number	Size (LxW) [mm]	T (max) [mm]	I Sat.(max)* [A]	I Temp.(max)* [A]	Rdc(max) [Ω]	Temp.[°C]	Inductance	L Tole.	Applications	Qualification
LAYPH06045DL1R0NGA	6.3x6.0	4.8	6.7	4.2	0.0117	-55 to +150	1.0 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL1R5NGA	6.3x6.0	4.8	5.5	4	0.013	-55 to +150	1.5 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL2R2NGA	6.3x6.0	4.8	4.2	3.6	0.0169	-55 to +150	2.2 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL3R3NGA	6.3x6.0	4.8	3.5	3.3	0.0195	-55 to +150	3.3 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL4R7NGA	6.3x6.0	4.8	3.1	3	0.026	-55 to +150	4.7 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL6R8NGA	6.3x6.0	4.8	2.5	2.6	0.0377	-55 to +150	6.8 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL100MGA	6.3x6.0	4.8	2	2.1	0.0456	-55 to +150	10 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL150MGA	6.3x6.0	4.8	1.7	1.7	0.0768	-55 to +150	15 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL220MGA	6.3x6.0	4.8	1.3	1.5	0.0948	-55 to +150	22 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL330MGA	6.3x6.0	4.8	1.1	1.4	0.12	-55 to +150	33 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL470MGA	6.3x6.0	4.8	0.85	1.2	0.162	-55 to +150	47 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL680MGA	6.3x6.0	4.8	0.8	0.9	0.252	-55 to +150	68 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL101MGA	6.3x6.0	4.8	0.55	0.7	0.384	-55 to +150	100 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL151MGA	6.3x6.0	4.8	0.5	0.65	0.57	-55 to +150	150 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL221MGA	6.3x6.0	4.8	0.44	0.5	0.804	-55 to +150	220 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH06045DL331MGA	6.3x6.0	4.8	0.36	0.4	1.14	-55 to +150	330 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL1R0NGA	10.1x10.0	4.3	10.7	3.6	0.01	-55 to +150	1.0 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL1R5NGA	10.1x10.0	4.3	8.6	3.3	0.012	-55 to +150	1.5 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL2R2NGA	10.1x10.0	4.3	7.5	3.1	0.014	-55 to +150	2.2 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL3R3NGA	10.1x10.0	4.3	6.6	2.9	0.017	-55 to +150	3.3 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL4R7NGA	10.1x10.0	4.3	5.2	2.7	0.025	-55 to +150	4.7 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL6R8NGA	10.1x10.0	4.3	4.3	2.3	0.031	-55 to +150	6.8 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL100MGA	10.1x10.0	4.3	3.7	2	0.035	-55 to +150	10 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL150MGA	10.1x10.0	4.3	2.9	1.6	0.052	-55 to +150	15 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL220MGA	10.1x10.0	4.3	2.5	1.5	0.074	-55 to +150	22 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL330MGA	10.1x10.0	4.3	2	1.1	0.115	-55 to +150	33 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL470MGA	10.1x10.0	4.3	1.7	0.76	0.162	-55 to +150	47 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL680MGA	10.1x10.0	4.3	1.4	0.74	0.216	-55 to +150	68 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL101MGA	10.1x10.0	4.3	1.1	0.59	0.342	-55 to +150	100 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL151MGA	10.1x10.0	4.3	0.94	0.44	0.474	-55 to +150	150 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL221MGA	10.1x10.0	4.3	0.77	0.41	0.636	-55 to +150	220 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL331MGA	10.1x10.0	4.3	0.61	0.29	1.152	-55 to +150	330 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10040DL471MGA	10.1x10.0	4.3	0.53	0.25	1.44	-55 to +150	470 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL1R0NGA	10.1x10.0	6.3	9.7	9	0.006	-55 to +150	1.0 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL1R5NGA	10.1x10.0	6.3	9	8	0.007	-55 to +150	1.5 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL2R2NGA	10.1x10.0	6.3	7.5	7.5	0.009	-55 to +150	2.2 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL3R3NGA	10.1x10.0	6.3	7	6.5	0.012	-55 to +150	3.3 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL4R7NGA	10.1x10.0	6.3	5.8	5.5	0.014	-55 to +150	4.7 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL6R8NGA	10.1x10.0	6.3	5.5	5	0.021	-55 to +150	6.8 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL100MGA	10.1x10.0	6.3	4.3	4.3	0.026	-55 to +150	10 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL150MGA	10.1x10.0	6.3	3.7	3.6	0.037	-55 to +150	15 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL220MGA	10.1x10.0	6.3	3.1	2.8	0.053	-55 to +150	22 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL330MGA	10.1x10.0	6.3	2.4	2.6	0.073	-55 to +150	33 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL470MGA	10.1x10.0	6.3	2.1	2.2	0.098	-55 to +150	47 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL680MGA	10.1x10.0	6.3	1.7	2	0.121	-55 to +150	68 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL101MGA	10.1x10.0	6.3	1.4	1.5	0.203	-55 to +150	100 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL151MGA	10.1x10.0	6.3	1.2	1.3	0.295	-55 to +150	150 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL221MGA	10.1x10.0	6.3	0.95	1	0.384	-55 to +150	220 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL331MGA	10.1x10.0	6.3	0.75	0.9	0.55	-55 to +150	330 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAYPH10060DL471MGA	10.1x10.0	6.3	0.65	0.7	0.93	-55 to +150	470 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200

*Saturation current max: 30% reduction from initial L value. Temp rise current max: Temperature will rise by 40 deg C.

Wire-Wound Ferrite Power Inductors LAXH series for Automotive Powertrain and Safety

Simple Product Catalog

Part Number	Size (LxW) [mm]	T (max) [mm]	I Sat.(max)* [A]	I Temp.(max)* [A]	Rdc(max) [Ω]	Temp.[°C]	Inductance	L Tole.	Applications	Qualification
LAXHG5050XATR47NMR	5.0x5.0	3.1	11	6.8	0.013	-40 to +150	0.47 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAXHG5050XAT1R0NMR	5.0x5.0	3.1	7.5	5.1	0.0185	-40 to +150	1.0 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAXHG5050XAT1R5NMR	5.0x5.0	3.1	6.3	4.5	0.0216	-40 to +150	1.5 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAXHG5050XAT2R2NMR	5.0x5.0	3.1	5.1	4	0.029	-40 to +150	2.2 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAXHG5050XAT3R3NMR	5.0x5.0	3.1	4.3	3.5	0.037	-40 to +150	3.3 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAXHG5050XAT4R7MMR	5.0x5.0	3.1	3.5	3	0.052	-40 to +150	4.7 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LAXHG5050XAT6R8MMR	5.0x5.0	3.1	3	2.25	0.078	-40 to +150	6.8 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q201
LAXHG5050XAT100MMR	5.0x5.0	3.1	2.5	1.9	0.115	-40 to +150	10 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q202
LAXHG5050XAT150MMR	5.0x5.0	3.1	2	1.5	0.18	-40 to +150	15 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q203
LAXHG5050XAT220MMR	5.0x5.0	3.1	1.7	1.3	0.228	-40 to +150	22 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q204
LAXHG5050XKT470MMR	5.0x5.0	3	0.85	1	0.36	-40 to +150	47 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q205
LAXHG5050XKT101MMR	5.0x5.0	3	0.55	0.7	0.733	-40 to +150	100 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q206
LAXHG5050XKT151MMR	5.0x5.0	3	0.47	0.5	1.165	-40 to +150	150 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q207
LAXHG5050XKT221MMR	5.0x5.0	3	0.38	0.46	1.692	-40 to +150	220 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q208
LAXHG5050XKT471MMR	5.0x5.0	3	0.25	0.3	3.672	-40 to +150	470 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q209
LAXHG6060YEL1R0NMR	6.0x6.0	4.5	13.5	6.2	0.013	-40 to +150	1.0 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q210
LAXHG6060YEL1R5NMR	6.0x6.0	4.5	10	5.5	0.019	-40 to +150	1.5 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q211
LAXHG6060YEL2R2NMR	6.0x6.0	4.5	8.5	4.4	0.023	-40 to +150	2.2 uH	± 30 %	(A)Auto. (Powertrain, Safety)	AEC-Q212
LAXHG6060YEL3R3MMR	6.0x6.0	4.5	7	4	0.028	-40 to +150	3.3 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q213
LAXHG6060YEL4R7MMR	6.0x6.0	4.5	6	3.6	0.036	-40 to +150	4.7 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q214
LAXHG6060YEL6R8MMR	6.0x6.0	4.5	5.1	3.1	0.052	-40 to +150	6.8 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q215
LAXHG6060YEL100MMR	6.0x6.0	4.5	4	2.6	0.06	-40 to +150	10 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q216
LAXHG6060YEL150MMR	6.0x6.0	4.5	3.1	2.15	0.105	-40 to +150	15 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q217
LAXHG6060YEL220MMR	6.0x6.0	4.5	2.5	1.8	0.132	-40 to +150	22 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q218
LAXHG6060YEL330MMR	6.0x6.0	4.5	1.75	1.25	0.216	-40 to +150	33 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q219
LAXHG6060YEL470MMR	6.0x6.0	4.5	1.55	1.2	0.272	-40 to +150	47 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q220
LAXHG6060YEL680MMR	6.0x6.0	4.5	1.2	1.05	0.385	-40 to +150	68 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q221
LAXHG6060YEL101MMR	6.0x6.0	4.5	1.05	0.85	0.6	-40 to +150	100 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q222
LAXHG6060YEL151MMR	6.0x6.0	4.5	0.83	0.76	0.816	-40 to +150	150 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q223
LAXHG6060YEL221MMR	6.0x6.0	4.5	0.7	0.57	1.32	-40 to +150	220 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q224
LAXHG6060YEL331MMR	6.0x6.0	4.5	0.55	0.45	1.872	-40 to +150	330 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q225
LAXHG6060YEL471MMR	6.0x6.0	4.5	0.45	0.38	2.76	-40 to +150	470 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q226

*Saturation current max: 30% reduction from initial L value. Temp rise current max: Temperature will rise by 40 deg C.

Multilayer Metal Power Inductors MCOIL™ LACN series for Automotive Powertrain and Safety

Simple Product Catalog

Part Number	Size (LxW) [mm]	T (max) [mm]	I Sat.(max)* [A]	I Temp.(max)* [A]	Rdc(max) [Ω]	Temp.[°C]	Inductance	L Tole.	Applications	Qualification
LACNF2012KKTR24MAB	2.0x1.25	1	4.8	5.4	0.019	-55 to +165	0.24 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LACNF2012KKTR33MAB	2.0x1.25	1	4.4	4.5	0.028	-55 to +165	0.33 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LACNF2012KKTR47MAB	2.0x1.25	1	3.8	3.8	0.038	-55 to +165	0.47 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200
LACNF2012KKT1R0MAB	2.0x1.25	1	2.7	2.7	0.08	-55 to +165	1.0 uH	± 20 %	(A)Auto. (Powertrain, Safety)	AEC-Q200

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