

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

REMINDERS

- ◆ Product information in this catalog is subject to change without notice, and is for reference only. Therefore, please contact GOTREND Technology to check for the latest information before practical application or usage of the products.
- ◆ This catalog contains only typical specifications, please contact GOTREND Technology for further details if you can not find special components or information you need in this catalogue. Please also approve our product specifications or transact the approval sheet for product specifications before ordering.
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- ◆ Please read Attention and CAUTION note (for storage, operating, rating, soldering, mounting and handling) in this catalog to ensure product proper usage.
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- ◆ Information and data provided in the brochure can and do vary in different applications, and actual performance may vary over time.
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- ◆ Any reproduction or extraction of the contents in this catalog is prohibited without prior permission from GOTREND Technology.
- ◆ Products listed in this catalog are intended for general electronic device usage under normal operation and use condition including telecommunication equipment, home appliances, sports equipment AV equipment, industrial machine, office equipment etc. Please take note that our products are not designed, intended or authorized for use in below mentioned applications unless explicitly agreed in writing between the parties to avoid product failure that could result in situation where personal injury or death could occur.

- (1) Aerospace/Aviation equipment
- (2) Atomic energy-related equipment
- (3) Disaster prevention/crime prevention equipment
- (4) Electric heating apparatus, burning equipment
- (5) Medical equipment
- (6) Military equipment
- (7) Power-generation control equipment
- (8) Public information-processing equipment
- (9) Safety equipment
- (10) Seabed equipment
- (11) Transportation control equipment
- (12) Transportation equipment (cars, electric trains, ships, etc.)
- (13) Other applications that are not considered general-purpose applications

- ◆ Our manufacturing sites fully compliance with requirement regarding the quality management system in the automotive industry under the IATF 16949 standard. GOTREND Technology respect individual agreements with reference to customer requirements and customer specific requirements (CSR). We will like to emphasize that only requirements mutually agreed upon will in implemented in our Quality Management System taking into consideration that IATF 16949 may appear to support the acceptance of unilateral requirements. We will only legally bind to this individually agreed upon agreement under the IATF 16949 standard.

- ◆ The product itself is a powder metallurgy product, so the structure is relatively fragile, and it should not be used for products that are easy to fall. In addition, when this product is assembled, it should avoid collision with the tool or mechanism shell.



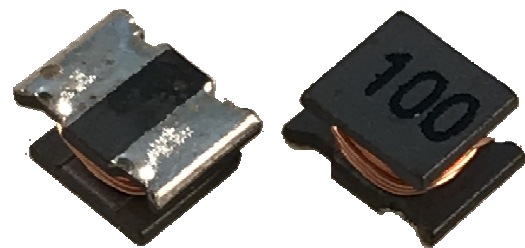
- ◆ It is not recommended to use hot air gun for disassembling of this product. When using of hot air gun to repair other parts, please also take note that long time or high temperature exposure of this product will also damage the inductance device. If you need to use the hot air gun to disassemble the product, it is recommended to adjust the hot air gun temperature to 380 deg.C±5 deg.C. The blower head of the hot air gun should be perpendicular and at least 1cm away from the product. After heating the product to the tin material melting point, use tweezers to remove the product from the PCB.



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Features & Application :

- * High-Q value for signal line
- * Wide band signal line,PWM circuit in/output inductor
- * To help you go pass the CE/FCC standard.
- * Especially for XDSL Lan & Communication
- * **Qualified AEC-Q200**
- * **Automotive and other high temperature , high reliability application .**



(Picture for reference only)

Part No. Example :

PN	:	GTLQH	43	P	G	-	121	J	-	AE
-----		-----	-----	---	-----		-----	---		-----
ID	:	1	2	3	4		5	6		7
1	:	GOTREND Series : GTLQH								
2	:	Size Code : 25=2.5x2.0, 43=4.5x3.2...etc.								
3	:	[P] : Pb Free < 1000ppm								
4	:	[G] : Pour Epoxy [C] : High Current [L] : Low High enhance								
5	:	[L] Value : Inductance Ex.:121=120uH, 122=1200uH								
6	:	[L] Value Tolerance: J=5%, K=10%, M=20%, N=30%								
7	:	[AE] : Reliability comply with AEC-Q200 standard type.								

Basic Information :

Made in	China
Pin Foot	SMD
Shielding	No
J-STD-020	MSL Level 1
RoHS	Compliant
REACH	Compliant
Halogen	Free
Automotive	AEC Q200

Operating & Storage Condition :

- * Operating Temp -40 ~ +125 deg.C (Including self - temperature rise)
- * Storage Temp 1. -10 ~ +45 deg.C , 50 ~ 60% RH (Product with taping)
2. -40 ~ +125 deg.C (On board)
- * Storage Life Time 12 Month (Less than 40 deg.C and 60% RH)



Attention & Caution :

- * Keep out of Splashing water or salt water
- * Avoid Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
- * Avoid Vibrations or shocks which exceed the specified condition
- * Avoid Dew condense
- * Avoid Layout near the edge of PCB
- * Avoid Over flexure after SMT mounting & PCBA



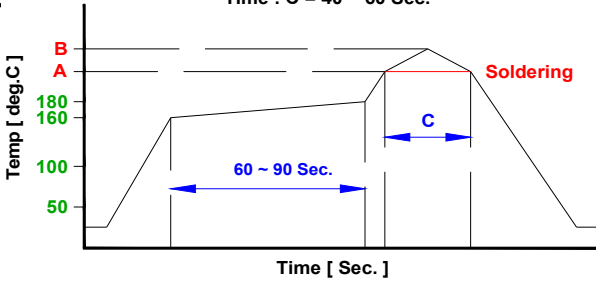
- * Pin foot or SMD pad solderability: Pb free type is best within 6 months after delivery
- * Humidity sensitive , IPC/JEDEC J-STD-020 MSL if over Level 1, recommend bake 30mins@150 degree before PCBA
- * Caution for human life relative applications : PLS contact & consult with GOTREND team in design stage.

Test Condition :

- * Equipment HP4284A , HP42841A - L , Q , DCR , IDC
HP8753D Network analyzer - SRF
- * Standard Atmosphere Conditions:
Ambient Temperature 20 ± 15 deg.C
Humidity RH 65 ± 20%
- * If there may be any doubt on the test result ,
Measurement shall be made within the following limits:
Ambient Temperature 25 ± 5 deg.C
Humidity RH 75 ± 10%

Recommend IR Reflow Curve : GTX-IR-FILE001

Lead Free Solder : A = 217 deg.C , B = 245+/-5 deg.C
Time : C = 40 ~ 60 Sec.

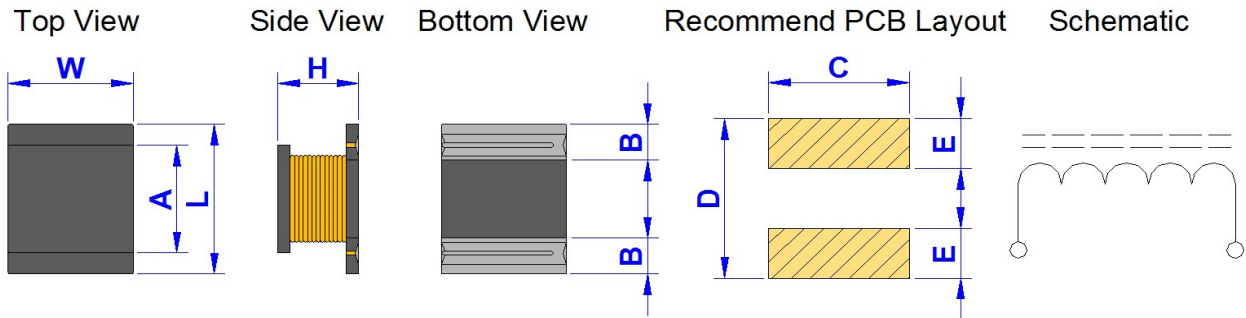


**Notice : Iron Soldering , Solder < 30 Watt ,
Direct touch the terminal x 3 Sec. Max. @ 350 deg.C**

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GTLQH20PL-SERIES-AE

Dimension [mm] :



Size	L(+/-0.2)	W(+/-0.2)	H(Max.)	A(+/-0.2)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
20L	2.0	1.6	1.05	2.0	0.4~0.8	2.0	2.7	1.0

Electrical Characteristics :

Part No.	L (uH)	Test Freq. (MHz / 0.2V)	DCR Ohm (Max.)	Isat (Amp) (Typ.)	Irms (Amp) (Typ.)
GTLQH20PL-1R0 □-AE	1.00	1.00	0.180	1.70	1.42
GTLQH20PL-1R5 □-AE	1.50	1.00	0.250	1.30	1.34
GTLQH20PL-2R2 □-AE	2.20	1.00	0.340	1.10	1.04
GTLQH20PL-3R3 □-AE	3.30	1.00	0.435	0.98	0.90
GTLQH20PL-4R7 □-AE	4.70	1.00	0.590	0.82	0.72
GTLQH20PL-5R6 □-AE	5.60	1.00	0.740	0.74	0.68
GTLQH20PL-6R8 □-AE	6.80	1.00	0.840	0.67	0.62
GTLQH20PL-100 □-AE	10.00	1.00	1.200	0.58	0.58
GTLQH20PL-150 □-AE	15.00	1.00	1.800	0.41	0.43
GTLQH20PL-220 □-AE	22.00	1.00	2.680	0.38	0.40

* L value Tolerance : M = 20% , N = 30%

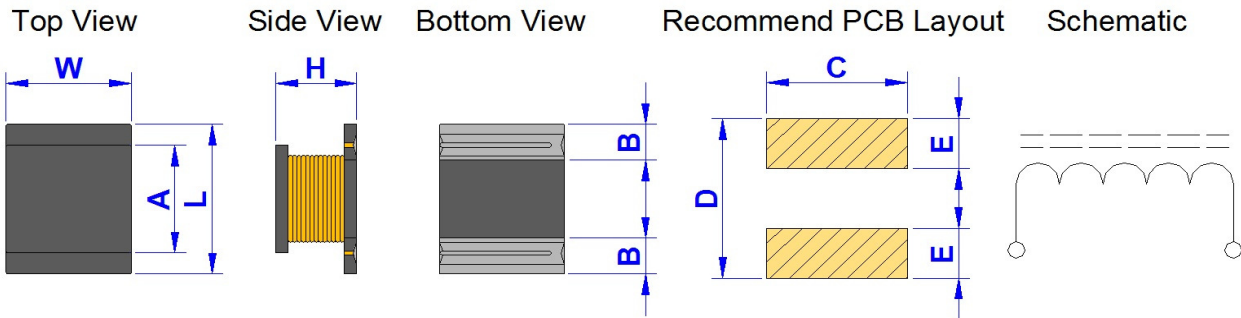
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GTLQH20P-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
20	2.1	1.5	1.4	2.0	0.4~0.8	1.8	2.5	0.7

Electrical Characteristics :

Part No.	L(uH) Tolerance 10%	Test Freq. KHz	DCR Ohm (Max.)	IDC (Amp) (Max.)
GTLQH20P-R10M-AE	0.10	100.00	0.018	4.24
GTLQH20P-R12M-AE	0.12	100.00	0.022	3.97
GTLQH20P-R15M-AE	0.15	100.00	0.023	3.87
GTLQH20P-R18M-AE	0.18	100.00	0.029	3.10
GTLQH20P-R22M-AE	0.22	100.00	0.034	3.07
GTLQH20P-R27M-AE	0.27	100.00	0.042	2.46
GTLQH20P-R33M-AE	0.33	100.00	0.048	2.07
GTLQH20P-R39M-AE	0.39	100.00	0.059	1.61
GTLQH20P-R47M-AE	0.47	100.00	0.068	1.53
GTLQH20P-R56M-AE	0.56	100.00	0.091	1.48
GTLQH20P-R68M-AE	0.68	100.00	0.101	1.37
GTLQH20P-R82M-AE	0.82	100.00	0.116	1.28
GTLQH20P-1R0M-AE	1.00	100.00	0.160	0.75
GTLQH20P-1R5M-AE	1.50	100.00	0.247	0.70
GTLQH20P-2R0M-AE	2.00	100.00	0.300	0.65
GTLQH20P-2R2M-AE	2.20	100.00	0.330	0.61
GTLQH20P-2R7M-AE	2.70	100.00	0.360	0.55
GTLQH20P-3R3M-AE	3.30	100.00	0.500	0.50
GTLQH20P-3R9M-AE	3.90	100.00	0.700	0.49
GTLQH20P-4R7M-AE	4.70	100.00	0.740	0.47
GTLQH20P-6R8M-AE	6.80	100.00	0.970	0.45
GTLQH20P-8R2M-AE	8.20	100.00	1.490	0.40
GTLQH20P-100M-AE	10.00	1.00	1.620	0.37
GTLQH20P-120M-AE	12.00	1.00	1.890	0.34

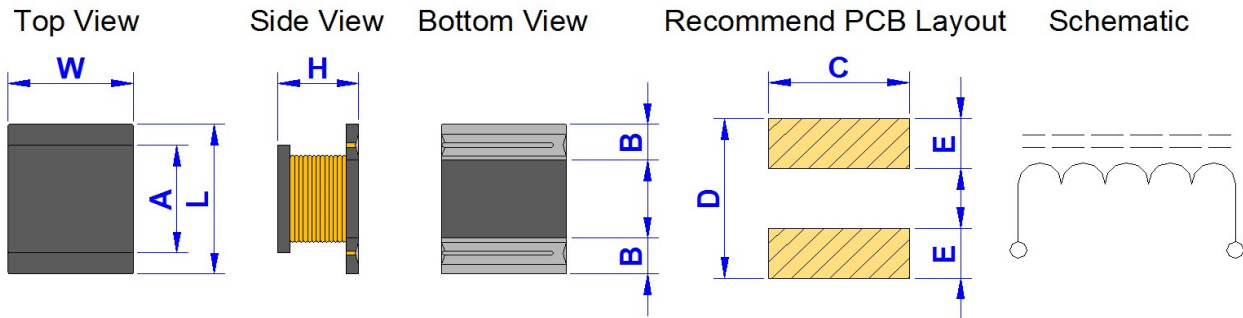
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GTLQH20P-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
20	2.1	1.5	1.4	2.0	0.4~0.8	1.8	2.5	0.7

Electrical Characteristics :

Part No.	L(uH) Tolerance 10%	Test Freq. KHz	DCR Ohm (Max.)	IDC (Amp) (Max.)
GTLQH20P-150□-AE	15.00	1.00	2.170	0.32
GTLQH20P-220□-AE	22.00	1.00	3.420	0.25
GTLQH20P-270□-AE	27.00	1.00	4.280	0.21
GTLQH20P-330□-AE	33.00	1.00	5.470	0.20
GTLQH20P-390□-AE	39.00	1.00	6.290	0.17
GTLQH20P-470□-AE	47.00	1.00	9.870	0.13
GTLQH20P-680□-AE	68.00	1.00	12.170	0.11
GTLQH20P-820□-AE	82.00	1.00	14.500	0.09
GTLQH20P-101□-AE	100.00	1.00	19.620	0.08
GTLQH20P-121□-AE	120.00	1.00	22.030	0.02

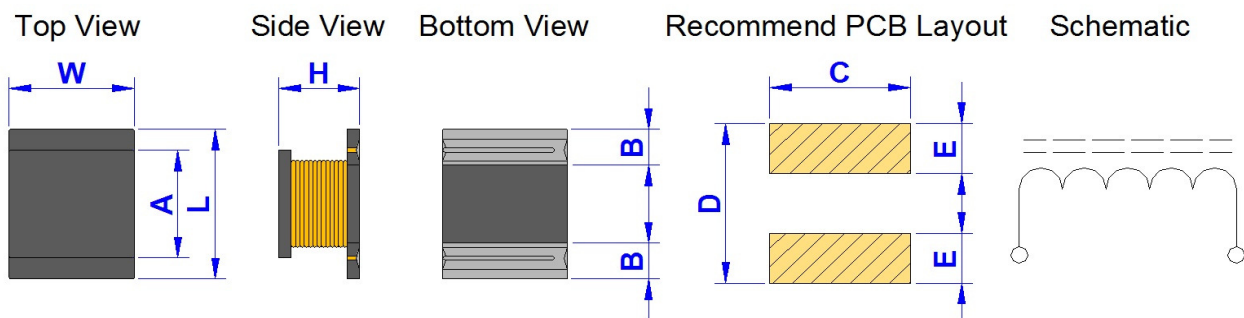
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GTLQH25PL-SERIES-AE

Dimension [mm] :



Size	L(+/-0.2)	W(+/-0.2)	H(Max.)	A(+/-0.2)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
25L	2.5	2.1	1.05	2.5	0.6~1.0	2.5	3.2	1.2

Electrical Characteristics :

Part No.	L (uH)	Test Freq. (MHz / 0.2V)	DCR Ohm (Max.)	Isat (Amp) (Typ.)	Irms (Amp) (Typ.)
GTLQH25PL-1R0 <input type="checkbox"/> -AE	1.00	1.00	0.110	2.00	1.90
GTLQH25PL-1R5 <input type="checkbox"/> -AE	1.50	1.00	0.145	1.80	1.64
GTLQH25PL-2R2 <input type="checkbox"/> -AE	2.20	1.00	0.230	1.40	1.60
GTLQH25PL-3R3 <input type="checkbox"/> -AE	3.30	1.00	0.295	1.20	1.10
GTLQH25PL-4R7 <input type="checkbox"/> -AE	4.70	1.00	0.390	1.00	1.02
GTLQH25PL-5R6 <input type="checkbox"/> -AE	5.60	1.00	0.480	0.96	0.88
GTLQH25PL-6R8 <input type="checkbox"/> -AE	6.80	1.00	0.605	0.84	0.82
GTLQH25PL-100 <input type="checkbox"/> -AE	10.00	1.00	0.790	0.70	0.74
GTLQH25PL-220 <input type="checkbox"/> -AE	22.00	1.00	1.810	0.49	0.46

* L value Tolerance : M = 20% , N = 30%

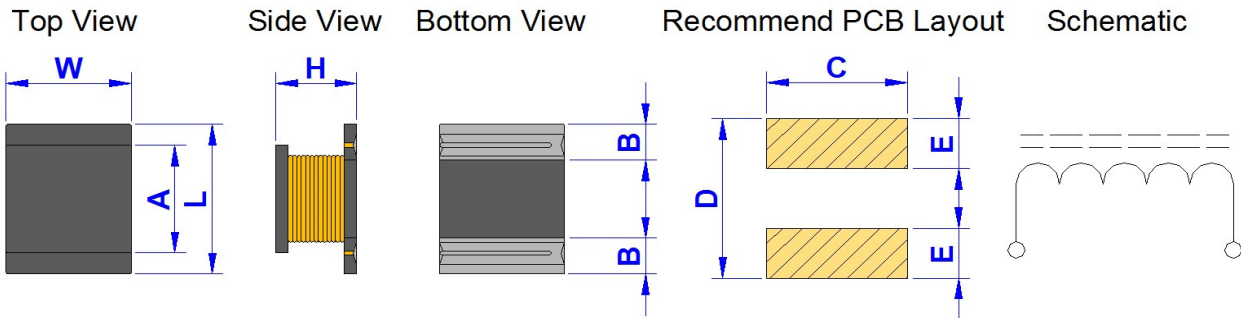
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GTLQH31P-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
31	3.2	1.6	1.8	2.3	0.4~0.9	3.5	4.5	1.6

Electrical Characteristics :

Part No.	L(uH) @1.0MHz	L+/-% (best)	Q (Ref.) Test @KHz Freq.	DCR (Ohm) (Max.)	SRF (MHz) (Min.)	IDC (mA) (Max.)
GTLQH31P-R10M-AE	0.10	20	10@2520	0.11	200.0	185
GTLQH31P-R12M-AE	0.12	20	10@2520	0.13	200.0	184
GTLQH31P-R22M-AE	0.22	20	10@2520	0.14	200.0	183
GTLQH31P-R29M-AE	0.29	20	10@2520	0.15	200.0	182
GTLQH31P-R47M-AE	0.47	20	10@2520	0.17	200.0	178
GTLQH31P-R50M-AE	0.50	20	10@2520	0.18	160.0	172
GTLQH31P-1R0M-AE	1.00	20	10@1000	0.49	100.0	175
GTLQH31P-1R2M-AE	1.20	20	10@1000	0.50	100.0	165
GTLQH31P-1R5M-AE	1.50	20	10@1000	0.52	75.0	155
GTLQH31P-1R8M-AE	1.80	20	10@1000	0.53	60.0	150
GTLQH31P-2R2M-AE	2.20	20	10@1000	0.54	50.0	140
GTLQH31P-2R7K-AE	2.70	10	10@1000	0.55	43.0	135
GTLQH31P-3R3K-AE	3.30	10	10@1000	0.61	38.0	130
GTLQH31P-3R9K-AE	3.90	10	10@1000	1.50	35.0	125
GTLQH31P-4R7K-AE	4.70	10	20@1000	1.70	31.0	120
GTLQH31P-5R6K-AE	5.60	10	20@1000	1.80	28.0	115
GTLQH31P-6R8K-AE	6.80	10	20@1000	2.00	25.0	110
GTLQH31P-8R2K-AE	8.20	10	20@1000	2.20	23.0	105
GTLQH31P-100K-AE	10.00	10	25@1000	2.50	20.0	100
GTLQH31P-110K-AE	11.00	10	25@1000	2.60	20.0	97
GTLQH31P-120K-AE	12.00	10	25@1000	2.70	18.0	95
GTLQH31P-150K-AE	15.00	10	25@1000	2.90	16.0	90
GTLQH31P-180K-AE	18.00	10	25@1000	3.00	15.0	85
GTLQH31P-220K-AE	22.00	10	25@1000	3.10	14.0	85
GTLQH31P-270K-AE	27.00	10	25@1000	3.40	13.0	85
GTLQH31P-330K-AE	33.00	10	25@1000	3.80	12.0	80

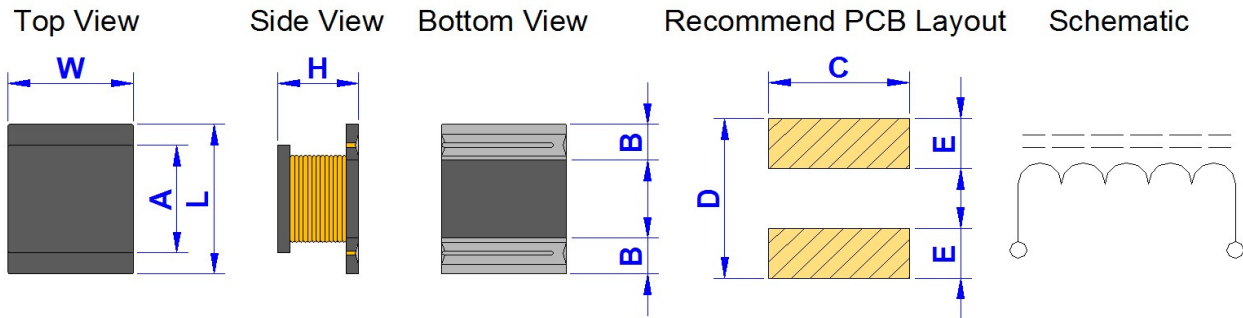
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Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
31	3.2	1.6	1.8	2.3	0.4~0.9	3.5	4.5	1.6

Electrical Characteristics :

Part No.	L(uH) @1.0MHz	L+/-% (best)	Q (Ref.) Test @KHz Freq.	DCR (Ohm) (Max.)	SRF (MHz) (Min.)	IDC (mA) (Max.)
GTLQH31P-390K-AE	39.00	10	25@1000	4.50	11.0	85
GTLQH31P-470K-AE	47.00	10	25@1000	6.30	11.0	85
GTLQH31P-560J-AE	56.00	5	25@1000	7.10	10.0	50
GTLQH31P-680J-AE	68.00	5	25@1000	7.90	9.0	50
GTLQH31P-820J-AE	82.00	5	25@1000	8.70	8.5	45
GTLQH31P-101J-AE	100.00	5	30@796	11.57	8.0	45
GTLQH31P-111J-AE	110.00	5	30@796	13.00	8.0	25
GTLQH31P-121J-AE	120.00	5	30@796	14.20	7.5	20
GTLQH31P-151J-AE	150.00	5	30@796	15.03	7.0	15
GTLQH31P-181J-AE	180.00	5	30@796	16.60	6.0	13
GTLQH31P-221J-AE	220.00	5	30@796	26.46	5.5	12
GTLQH31P-271J-AE	270.00	5	30@796	29.70	5.0	11
GTLQH31P-331J-AE	330.00	5	30@796	43.06	5.0	10
GTLQH31P-391J-AE	390.00	5	30@796	22.00	5.0	9
GTLQH31P-471J-AE	470@1KHZ	5	30@796	53.50	5.0	8
GTLQH31P-821J-AE	820@1KHZ	5	30@796	66.10	5.0	5

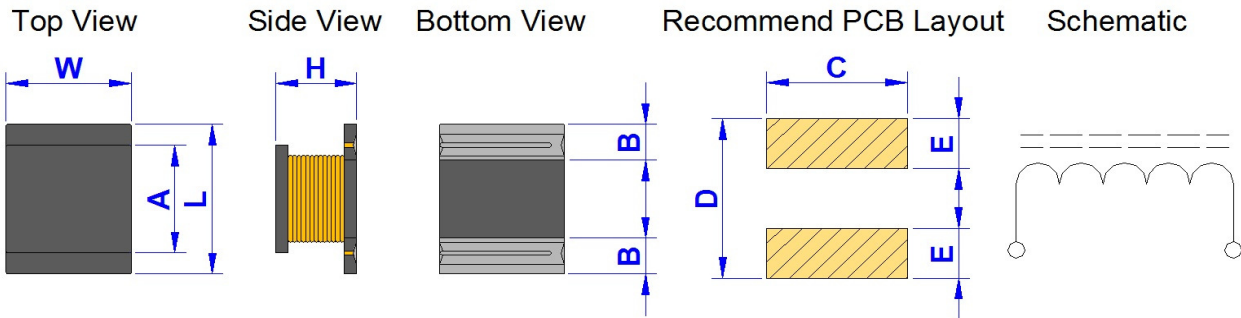
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GTLQH32P-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
32	3.2	2.5	2.0	2.5	0.7~1.2	3.5	4.5	1.6

Electrical Characteristics :

Part No.	L(uH) @1.0MHz	L+/-% (best)	Q (Ref.) Test @KHz Freq.	DCR (Ohm) (Max.)	SRF (MHz) (Min.)	IDC (mA) (Max.)
GTLQH32P-R10M-AE	0.10	20	10@2520	0.25	200.0	700
GTLQH32P-R18M-AE	0.18	20	10@2520	0.25	200.0	650
GTLQH32P-R27M-AE	0.27	20	10@2520	0.25	200.0	600
GTLQH32P-R33M-AE	0.33	20	10@2520	0.25	200.0	550
GTLQH32P-R39M-AE	0.39	20	10@2520	0.25	200.0	530
GTLQH32P-R56M-AE	0.56	20	10@2520	0.25	160.0	530
GTLQH32P-R68M-AE	0.68	20	10@2520	0.25	160.0	470
GTLQH32P-R82M-AE	0.82	20	10@2520	0.25	120.0	450
GTLQH32P-1R0M-AE	1.00	20	10@1000	0.50	100.0	445
GTLQH32P-1R2M-AE	1.20	20	10@1000	0.60	100.0	425
GTLQH32P-1R5M-AE	1.50	20	10@1000	0.60	75.0	400
GTLQH32P-1R8M-AE	1.80	20	10@1000	0.70	60.0	390
GTLQH32P-2R2M-AE	2.20	20	10@1000	0.80	50.0	370
GTLQH32P-2R7K-AE	2.70	10	10@1000	0.90	43.0	320
GTLQH32P-3R3K-AE	3.30	10	10@1000	1.00	38.0	300
GTLQH32P-3R9K-AE	3.90	10	10@1000	1.10	35.0	290
GTLQH32P-4R7K-AE	4.70	10	20@1000	1.20	31.0	270
GTLQH32P-5R6K-AE	5.60	10	20@1000	1.30	28.0	250
GTLQH32P-6R8K-AE	6.80	10	20@1000	1.50	25.0	240
GTLQH32P-8R2K-AE	8.20	10	20@1000	1.60	23.0	225
GTLQH32P-100K-AE	10.00	10	25@1000	1.80	20.0	190
GTLQH32P-120K-AE	12.00	10	25@1000	2.00	18.0	180
GTLQH32P-150K-AE	15.00	10	25@1000	2.20	16.0	170
GTLQH32P-180K-AE	18.00	10	25@1000	2.50	15.0	160
GTLQH32P-220K-AE	22.00	10	25@1000	2.80	14.0	150
GTLQH32P-270K-AE	27.00	10	25@1000	3.10	13.0	125

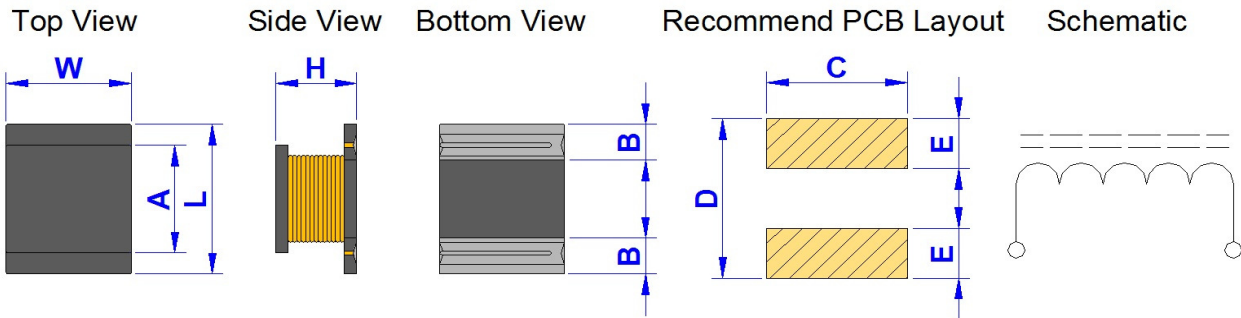
* L value Tolerance : K = 10% , M = 20%

* IDC : Inductance drop 10% from its value without current. and for a 40 deg.C rise above 25 deg.C ambient.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GTLQH32P-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
32	3.2	2.5	2.0	2.5	0.7~1.2	3.5	4.5	1.6

Electrical Characteristics :

Part No.	L(uH) @1.0MHz	L+/-% (best)	Q (Ref.) Test @KHz Freq.	DCR (Ohm) (Max.)	SRF (MHz) (Min.)	IDC (mA) (Max.)
GTLQH32P-330K-AE	33.00	10	25@1000	3.50	12.0	115
GTLQH32P-390K-AE	39.00	10	25@1000	3.90	11.0	110
GTLQH32P-470K-AE	47.00	10	25@1000	4.30	11.0	100
GTLQH32P-560J-AE	56.00	5	25@1000	4.90	10.0	85
GTLQH32P-680J-AE	68.00	5	25@1000	5.50	9.0	80
GTLQH32P-820J-AE	82.00	5	25@1000	6.20	8.5	80
GTLQH32P-101J-AE	100.00	5	30@796	7.00	8.0	80
GTLQH32P-121J-AE	120.00	5	30@796	8.00	7.5	75
GTLQH32P-151J-AE	150.00	5	30@796	9.30	7.0	70
GTLQH32P-181J-AE	180.00	5	30@796	10.20	6.0	65
GTLQH32P-221J-AE	220.00	5	30@796	11.80	5.5	65
GTLQH32P-271J-AE	270.00	5	30@796	12.50	5.0	65
GTLQH32P-331J-AE	330.00	5	30@796	13.00	5.0	65
GTLQH32P-391J-AE	390.00	5	30@796	22.00	5.0	50
GTLQH32P-471J-AE	470@1KHZ	5	30@796	25.00	5.0	45
GTLQH32P-501J-AE	500@1KHZ	5	30@796	27.00	5.0	42
GTLQH32P-561J-AE	560@1KHZ	5	30@796	28.00	5.0	40
GTLQH32P-681J-AE	680@1KHZ	5	30@796	30.00	5.0	35
GTLQH32P-102J-AE	1000@1KHZ	5	30@796	39.20	5.0	30

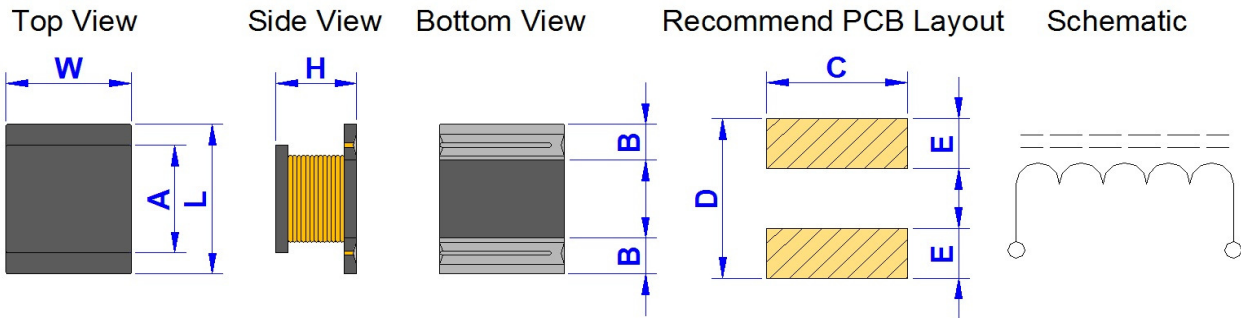
* L value Tolerance : J = 5% , K = 10%

* IDC : Inductance drop 10% from its value without current. and for a 40 deg.C rise above 25 deg.C ambient.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GTLQH32PC-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
32	3.2	2.5	2.0	2.5	0.7~1.2	3.5	4.5	1.6

Electrical Characteristics :

Part No.	L(uH)	L.+/-% (best)	L-Test @ Freq.	DCR (Ohm) (Max.)	SRF (MHz) (Min. / Typ.)	IDC (mA) (Max.)
GTLQH32PC-R47M-T-AE	0.47	20	1.0MHz	0.038	100 / 200	2,290
GTLQH32PC-1R0M-T-AE	1.0	20	1.0MHz	0.078	100 / 200	1,000
GTLQH32PC-2R2M-T-AE	2.2	20	1.0MHz	0.126	64 / 120	790
GTLQH32PC-4R7M-T-AE	4.7	20	1.0MHz	0.195	43 / 77	650
GTLQH32PC-100K -T-AE	10.0	10	1.0MHz	0.390	26 / 50	450
GTLQH32PC-1R0M-AE	1.0	20	1.0MHz	0.117	100 / 150	800
GTLQH32PC-1R8M-AE	1.8	20	1.0MHz	0.140	64 / 100	780
GTLQH32PC-2R2M-AE	2.2	20	1.0MHz	0.169	64 / 100	600
GTLQH32PC-3R3M-AE	3.3	20	1.0MHz	0.180	54 / 100	500
GTLQH32PC-4R7M-AE	4.7	20	1.0MHz	0.260	43 / 66	450
GTLQH32PC-6R8M-AE	6.8	20	1.0MHz	0.350	30 / 45	380
GTLQH32PC-100K-AE	10.0	10	1.0MHz	0.572	26 / 40	300
GTLQH32PC-220K-AE	22.0	10	1.0MHz	0.923	19 / 27	250
GTLQH32PC-330K-AE	33.0	10	1.0MHz	1.350	17 / 22	220
GTLQH32PC-470K-AE	47.0	10	1.0MHz	1.690	15 / 19	170
GTLQH32PC-101K-AE	100.0	10	1.0MHz	4.550	10 / 13	100
GTLQH32PC-221K-AE	220.0	10	1.0MHz	10.920	6.8 / 8.5	70
GTLQH32PC-331K-AE	330.0	10	1.0MHz	13.000	5.6 / 7.0	60
GTLQH32PC-391K-AE	390.0	10	1.0MHz	22.100	5 / 6.6	60
GTLQH32PC-471K-AE	470.0	10	1.0KHz	24.700	5 / 6.2	60
GTLQH32PC-561K-AE	560.0	10	1.0KHz	28.600	5 / 5.7	60

* Attention: This 3225 size Part No with "T" means note Low DCR

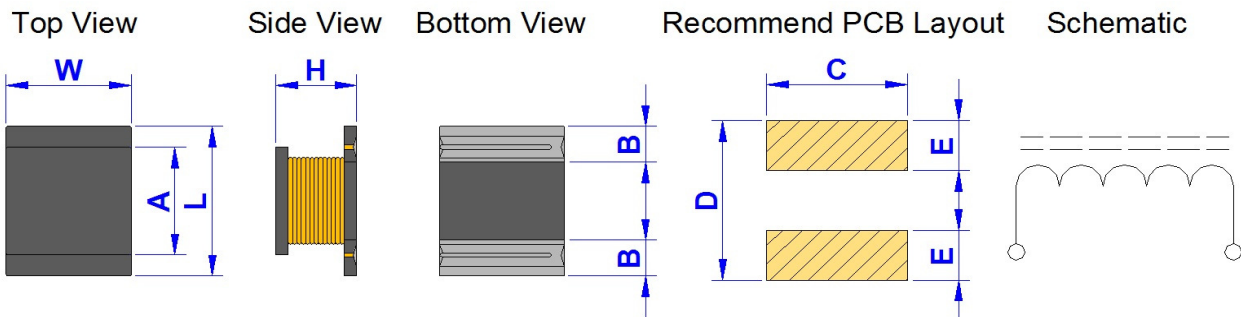
* L value Tolerance : K = 10% , M = 20%

* IDC : Inductance drop 10% from its value without current. and for a 40 deg.C rise above 25 deg.C ambient.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GTLQH32PL-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.2)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
32L	3.2	2.5	1.55	2.5	0.7~1.2	3.5	4.5	1.6

Electrical Characteristics :

Part No.	L(uH) @1.0KHZ,0.25V	L+/-% (best)	DCR (Ohm) (Max.)	IDC (A) (Max.)
GTLQH32PL-1R0 □-AE	1.00 @100KHZ	20	0.060	1.480
GTLQH32PL-1R4 □-AE	1.40 @100KHZ	20	0.079	1.380
GTLQH32PL-1R8 □-AE	1.80 @100KHZ	20	0.101	1.310
GTLQH32PL-2R2 □-AE	2.20 @100KHZ	20	0.125	1.250
GTLQH32PL-3R3 □-AE	3.30 @100KHZ	20	0.160	1.080
GTLQH32PL-4R7 □-AE	4.70 @100KHZ	20	0.236	0.980
GTLQH32PL-5R6 □-AE	5.60 @100KHZ	20	0.287	0.900
GTLQH32PL-6R8 □-AE	6.80 @100KHZ	20	0.371	0.790
GTLQH32PL-8R2 □-AE	8.20 @100KHZ	20	0.471	0.720
GTLQH32PL-100 □-AE	10.00	10	0.576	0.660
GTLQH32PL-120 □-AE	12.00	10	0.684	0.590
GTLQH32PL-150 □-AE	15.00	10	0.888	0.540
GTLQH32PL-180 □-AE	18.00	10	1.087	0.480
GTLQH32PL-220 □-AE	22.00	10	1.343	0.430
GTLQH32PL-330 □-AE	33.00	10	2.245	0.350
GTLQH32PL-470 □-AE	47.00	10	3.064	0.290
GTLQH32PL-560 □-AE	56.00	10	4.120	0.270
GTLQH32PL-680 □-AE	68.00	10	5.289	0.240
GTLQH32PL-820 □-AE	82.00	10	7.223	0.200
GTLQH32PL-101 □-AE	100.00	10	8.209	0.190
GTLQH32PL-121 □-AE	120.00	10	10.888	0.170
GTLQH32PL-151 □-AE	150.00	10	12.568	0.160
GTLQH32PL-181 □-AE	180.00	10	19.645	0.140
GTLQH32PL-221 □-AE	220.00	10	22.307	0.130
GTLQH32PL-271 □-AE	270.00	10	24.613	0.120
GTLQH32PL-331 □-AE	330.00	10	28.213	0.110

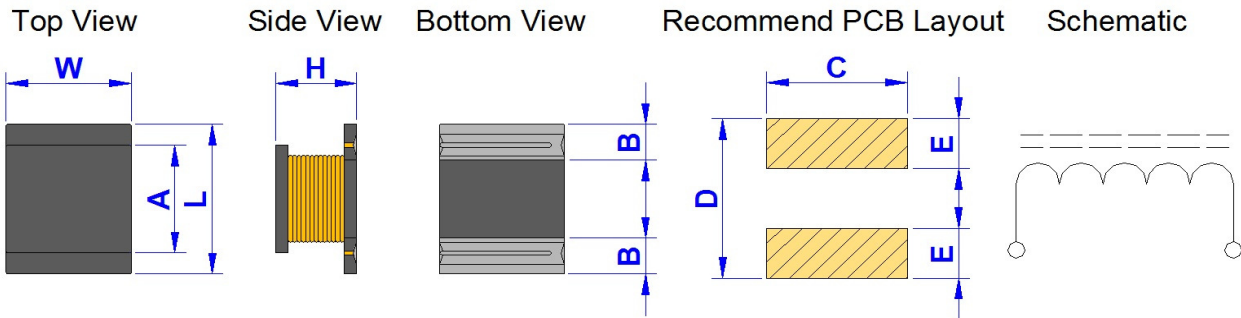
* L value Tolerance : J = 5% , K = 10% , M = 20%

* IDC : Inductance drop 10% from its value without current. and for a 40 deg.C rise above 25 deg.C ambient.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GTLQH32PL-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.2)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
32L	3.2	2.5	1.55	2.5	0.7~1.2	3.5	4.5	1.6

Electrical Characteristics :

Part No.	L(uH) @1.0KHz,0.25V	L+/-% (best)	DCR (Ohm) (Max.)	IDC (A)(Max.) $\Delta L/L(0A)=10\%$
GTLQH32PL-391 □-AE	390.00	10	32.187	0.100
GTLQH32PL-471 □-AE	470.00	10	48.747	0.090
GTLQH32PL-561 □-AE	560.00	5	53.893	0.080
GTLQH32PL-681 □-AE	680.00	5	63.013	0.070

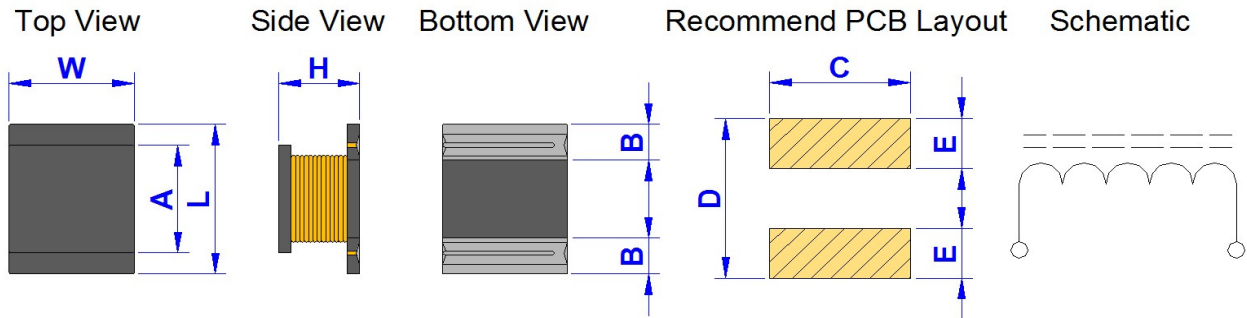
* L value Tolerance : J = 5% , K = 10% , M = 20%

* IDC : Inductance drop 10% from its value without current. and for a 40 deg.C rise above 25 deg.C ambient.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GTLQH43PC-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
43	4.5	3.2	2.6	3.6	1.0~1.8	4.2	5.5	2.3

Electrical Characteristics :

Part No.	L(uH) @1.0MHz	L+/-% (best)	DCR (Ohm) (Max.)	IDC (mA) (Max.)
GTLQH43PC-1R0 □-AE	1.00	20	0.08	1,080
GTLQH43PC-1R5 □-AE	1.50	20	0.09	1,000
GTLQH43PC-2R2 □-AE	2.20	20	0.11	900
GTLQH43PC-3R3 □-AE	3.30	20	0.13	800
GTLQH43PC-4R7 □-AE	4.70	20	0.15	750
GTLQH43PC-6R8 □-AE	6.80	20	0.20	720
GTLQH43PC-100 □-AE	10.00	10	0.24	650
GTLQH43PC-150 □-AE	15.00	10	0.32	570
GTLQH43PC-220 □-AE	22.00	10	0.60	420
GTLQH43PC-330 □-AE	33.00	10	1.00	310
GTLQH43PC-470 □-AE	47.00	10	1.10	280
GTLQH43PC-560 □-AE	56.00	10	1.34	260
GTLQH43PC-680 □-AE	68.00	10	1.70	220
GTLQH43PC-101 □-AE	100.00	5	2.20	190
GTLQH43PC-151 □-AE	150.00	5	3.50	130
GTLQH43PC-221 □-AE	220.00	5	4.00	110
GTLQH43PC-331 □-AE	330.00	5	6.80	100
GTLQH43PC-471 □-AE	470.00	5	8.50	90

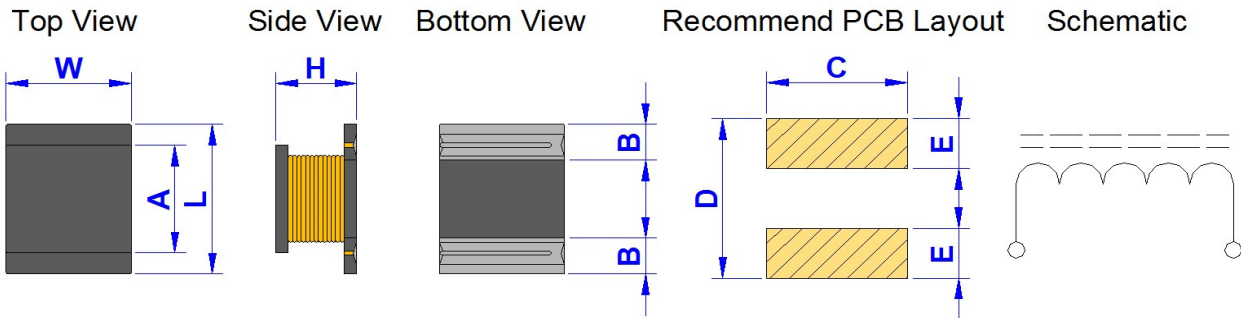
* L value Tolerance : J = 5% , K = 10% , M = 20%

* IDC : Inductance drop 10% from its value without current. and for a 40 deg.C rise above 25 deg.C ambient.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GTLQH56P-SERIES-AE

Dimension [mm] :



Size	L(+/-0.3)	W(+/-0.3)	H(+/-0.4)	A(+/-0.3)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)
56	5.7	5.0	4.7	5.0	1.1~1.9	6.5	7.0	2.5

Electrical Characteristics :

Part No.	L(uH) @1.0MHz	L+/-% (best)	DCR (Ohm) (Max.)	IDC (mA) (Max.)
GTLQH56P-R12 □-AE	0.12	30	0.010	6000
GTLQH56P-R27 □-AE	0.27	30	0.014	5300
GTLQH56P-R47 □-AE	0.47	30	0.018	4800
GTLQH56P-1R0 □-AE	1.00	30	0.027	4000
GTLQH56P-1R5 □-AE	1.50	20	0.031	3700
GTLQH56P-2R2 □-AE	2.20	20	0.041	3200
GTLQH56P-3R3 □-AE	3.30	20	0.050	2900
GTLQH56P-4R7 □-AE	4.70	20	0.057	2700
GTLQH56P-6R8 □-AE	6.80	20	0.10	2000
GTLQH56P-100 □-AE	10.00	10	0.13	1700
GTLQH56P-120 □-AE	12.00	10	0.20	1500
GTLQH56P-150 □-AE	15.00	10	0.21	1400
GTLQH56P-220 □-AE	22.00	10	0.27	1200
GTLQH56P-240 □-AE	24.00	10	0.29	1100
GTLQH56P-270 □-AE	27.00	10	0.30	1000
GTLQH56P-330 □-AE	33.00	10	0.45	900
GTLQH56P-470 □-AE	47.00	10	0.56	800
GTLQH56P-680 □-AE	68.00	10	0.94	640
GTLQH56P-101 □-AE	100.00	10	1.20	560
GTLQH56P-151 □-AE	150.00	10	2.66	420
GTLQH56P-221 □-AE	220.00	10	3.36	320
GTLQH56P-331 □-AE	330.00	10	6.16	270

* L value Tolerance : K = 10% , M = 20% , N = 30%

* IDC : Inductance drop 10% from its value without current. and for a 40 deg.C rise above 25 deg.C ambient.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Care note :

Care note for Use :

(1) Storage Condition :

Temperature 25 to 35 deg.C , Humidity 45 to 60% RH

(2) Use Temperature :

- a. Minimum Temperature : -40 deg.C Ambient temperature of this product.
- b. Maximum Temperature : +125 deg.C The value of temperature including ambient and temperature rise of this product.
- c. Reliability test temperature range from -40 ~ +125 deg.C
- d. However, this is not meant as temperature grade guarantee for UL.

(3) Model :

When this product was used in a similar or as new product to the original one, sometimes it might be unable to satisfy the specifications due to difference in condition of usage.

(4) Drop :

If this product suffered mechanical stress such as drop, characteristics may become poor (due to damage on coil / bobbin / ferrite ... etc.)

Never use such stressed product.

Care note for Safety :

(1) Provision to Abnormal Condition :

GTC1005P-33NJ2-AE

conditions, etc.

Therefore, it shall be confirmed from the end product that there is no risk of smoking, fire, dielectric withstand voltage insulation resistance,etc. in abnormal conditions to provide protective devices and /or protection circuit in the end product.

(2) Temperature Rise :

Temperature rise on this product depends on the installation condition on end products.

It shall be confirmed on the actual end product that temperature rise of this product is within the specified temperature class limit.

(3) Dielectric Strength :

Dielectric withstanding test with higher voltage than specific value will damage insulating material and shorten its life.

(4) Water :

This product must not be used in wet condition resulted from water, coffee or any liquid contact because insulation strength becomes very low under such condition.

(5) Potting :

If this product is potted in some compound, coating material of magnet wire might be occasionally damaged. Please ask us if you intend to pot this product.

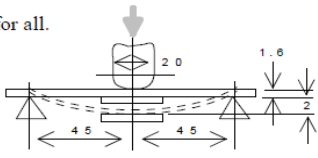
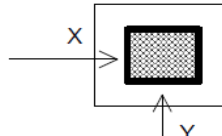
(6) Detergent :

Please consult our company immediately once under such circumstances because product reliability confirmation etc. is needed when this product come in contact with these chemicals.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Reliability :

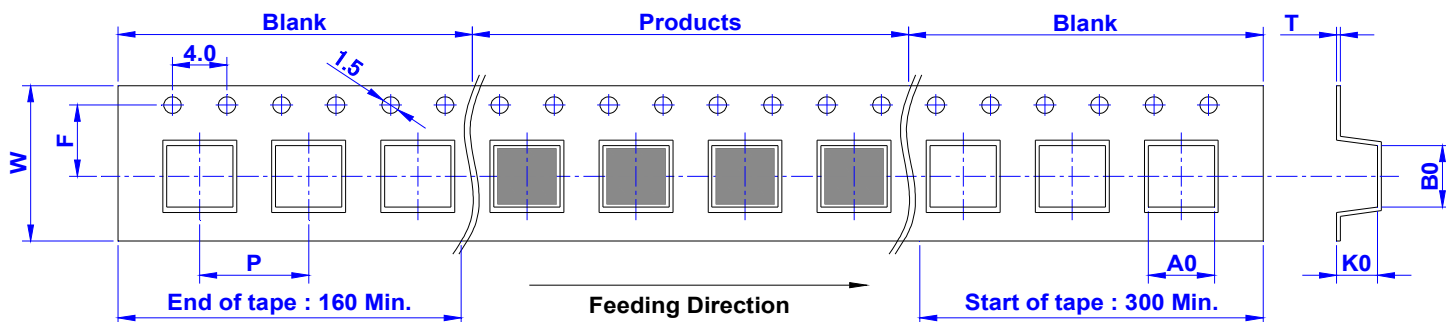
GTLQH-SERIES-V4R8-AE

SN	Test Item	Test Condition	Specification
1	External Visual MIL-STD-883 Method 2009	Inspect device construction and workmanship. Electrical test not required.	There is no change for appearance (electrode did not fall off , loose , no breakage , ferrite core did not break , damage)
2	Physical Dimension JESD22 Method JB-100	Verify physical dimensions to the device specification.	For Spec.
3	Thermal Shock MIL-STD-202 Method 107	Temperature : -40± 2 deg.C ~ +125± 2 deg.C Max transfer time : 20 s. Dwell time : 15 minutes. Air - Air	There is no change for appearance (electrode did not fall off , loose , no breakage , ferrite core did not break , damage) Inductor value / resistance change rate ± 10%.
4	Humidity Resistance MIL-STD-202 Method 103	Humidity : 85% RH Temperature : 85 deg.C Test time : 1000 Hours	There is no change for appearance (electrode did not fall off , loose , no breakage , ferrite core did not break , damage) Inductor value / resistance change rate ± 10%.
5	High Temperature MIL-STD-202 Method 108	Temperature: 125± 2 deg.C Test time: 1000 Hours	There is no change for appearance (electrode did not fall off , loose , no breakage , ferrite core did not break , damage) Inductor value / resistance change rate ± 10%.
6	Temperature and Humidity Cycle JESD22 Method JA-104	Temperature : -40 deg.C ~ +125 deg.C Cycles : 1000	There is no change for appearance (electrode did not fall off , loose , no breakage , ferrite core did not break , damage) Inductor value / resistance change rate ± 10%.
7	Operational Life MIL-PRF-27	Temperature : 125 deg.C Load : Allowed DC current Test time: 1000 Hours	No short circuit , open circuit.
8	Vibration MIL-STD-202 Method 204	5 g' s for 20 minutes , 12 cycles each of 3 orientations. Test from 10Hz ~ 2000Hz	No bad phenomenon.
9	Mechanical Shock MIL-STD-202 Method 213	Figure 1 of Method 213 SMD : Condition C.	No bad phenomenon.
10	Resistance to Soldering Head MIL-STD-202 Method 210	Condition B No pre-heat of samples. Temperature 250 up / 5 s. Temperature 183 up / 90 ~ 120 s.	Tin solder have to cover over 90% area.
GTC10 05P- 33NJ2- AE	Solderability J-STD-002	a. Method B , 4 Hours @ 155 deg.C dry heat @ 235 deg.C b. Method B @ 215 deg.C category 3 c. Method D @ 260 deg.C category 3	No change and transform form the appearance
12	Board Flex AETS	2 mm (min.) for all. 	No change and transform form the appearance
13	Terminal Streng AETS	Force of 1.8 Kg for 60 s. 	Fulfil quality requirements.
14	Resistance to Solvents MIL-STD-202 Method 215	Note : Add Aqueous wash chemical-OKEM or equivalent. No banned substances.	Fulfil quality requirements.

Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

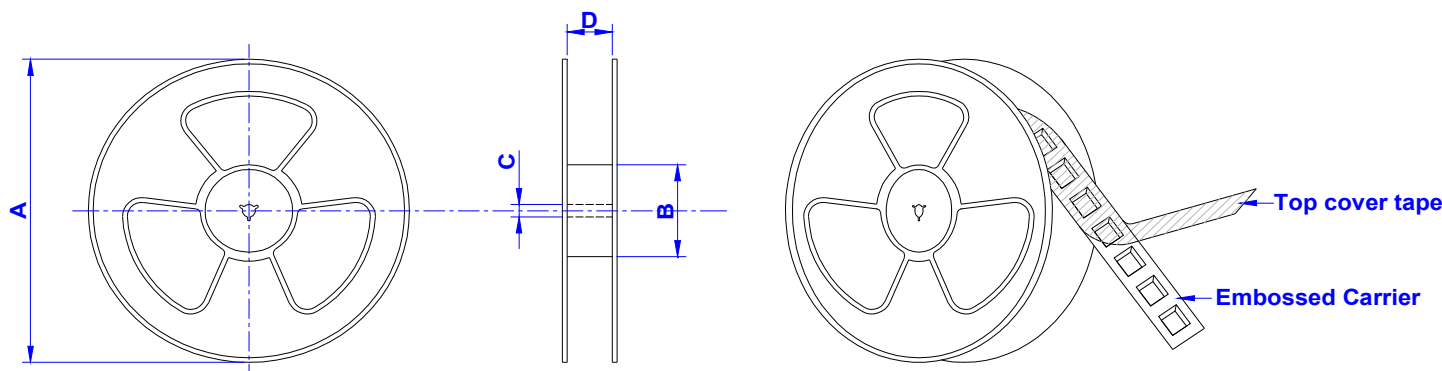
Packaging Information :

Tape Dimension (mm) :



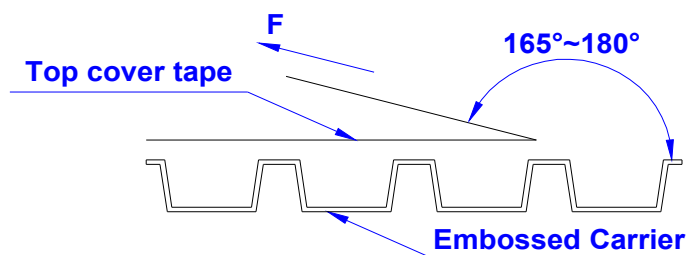
SIZE/mm	W	P	A0	B0	K0	T	F
20	8.00	4.00	2.70	2.75	2.00	0.22	3.50
25	8.00	4.00	2.70	2.75	2.00	0.22	3.50
31	12.00	8.00	2.00	3.60	2.20	0.22	5.50
32 / 32L	12.00	8.00	2.90	3.60	2.20	0.22	5.50
43	12.00	8.00	3.60	4.90	3.10	0.30	4.70
56	16.00	12.00	7.60	8.40	5.50	0.40	5.20

Reel Dimension (mm) :



SIZE/mm	Reel Size	A	B	C	D	QTY / Reel
20	7" x 8 mm	178	60	13	8.5	2000 PCS
25	7" x 8 mm	178	60	13	8.5	2000 PCS
25L	7" x 8 mm	178	60	13	8.5	2000 PCS
31	13" x 12 mm	330	100	13	12.5	3000 PCS
32 / 32L	13" x 12 mm	330	100	13	12.5	2500 PCS
43	13" x 12 mm	330	100	13	12.5	2000 PCS
56	13" x 16 mm	330	100	13	16.5	1000 PCS

Tearing Off Force :



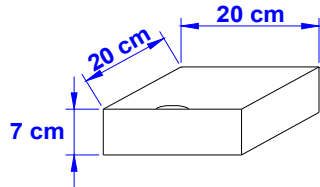
The force for tearing off cover tape is 10 to 130 grams in the arrow direction under the following conditions (referenced ANSI / EIA - 481 - D - 2008 of 4.11stadnard).

Room Temp. (deg.C)	Room Humidity (%)	Room Atm. (hPa)	Tearing Speed (mm / min)
5 ~ 35	45 ~ 85	860 ~ 1060	300

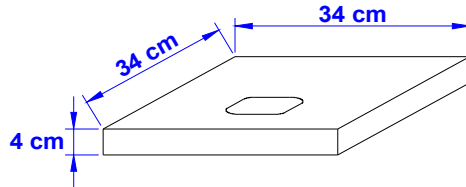
Product Series : GTLQH	Brand : GOTREND
File Version : GTLQH-SERIES-AE-V1R0	Editor : Qiuyi Wu
Established Date : 2022.06.29	Description : Ferrite Core Wound Inductor
Latest Edit Date : 2022.12.08	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Packaging Information :

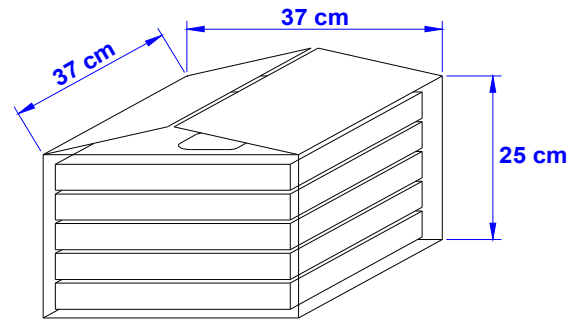
Box Package :



7" Small Box



13" Small Box



Large Box

SIZE/mm	Reels in Small Box	Small Box in Large Box
20	5	8
25	5	8
25L	5	8
31	2	5
32 / 32L	2	5
43	2	5
56	1	5