THE DATASHEET OF

GLF2012T1R0M

TDK's New Winding Ty
Chip Inductor

GLF,GLC Serie

TDK Electronics Europe GmbH - September 2004

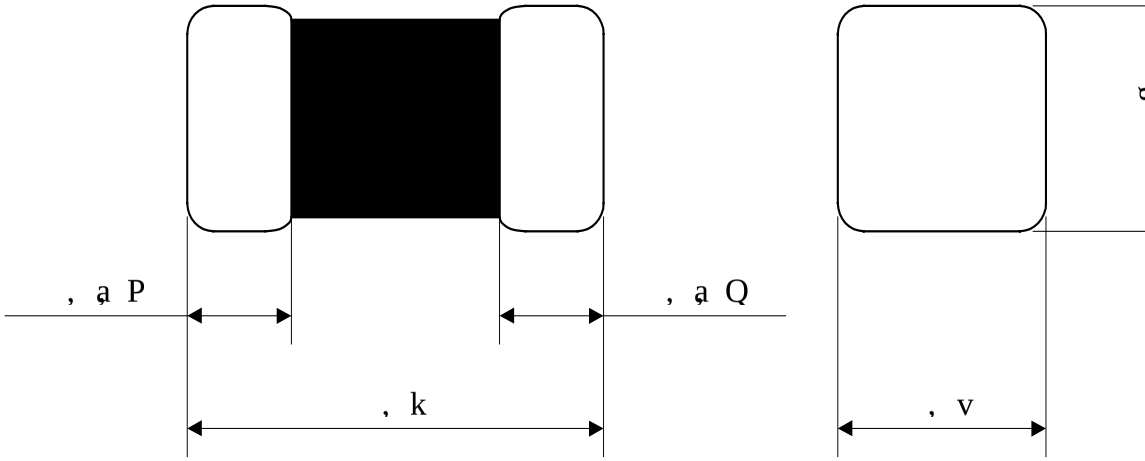
Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Item Line-Up

Area[mm²] \ Height[mm]		0.80mm	1.25mm	
1.28mm²	1.60X0.80	**GLF1608Type** L:1uH to 22uH Rdc:0.70ohm(10uH) Idc:90mA(10uH)	GLF_Type:Low Rd GLF_Type:Low Pr GLC_Type:High Id	
2.50mm²	2.00X1.25	**GLF201208Type** L:1uH to 47uH Rdc:1.10ohm(10uH) Idc:170mA(10uH)	**GLF2012Type** L:1uH to 100uH Rdc:0.36ohm(10uH) Idc:140mA(10uH)	
4.50mm²	2.50X1.80		**GLF251812Type** L:1uH to 100uH Rdc:0.60ohm(10uH) Idc:325mA(10uH)	**GLF2** L:1uH Rdc:0. Idc:21 **GLC2** L:1uH Rdc:0. Idc:30

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Shapes and Dimensions



	L [mm] ±0.10	W [mm] ±0.10	H [mm] ±0.10	B1 [mm] ±0.15	B2 [mm] ±0.15
GLF1608Type	**1.60**	**0.80**	**0.80**	**0.40**	**0.40**
GLF2012Type	**2.00**	**1.25**	**1.25**	**0.50**	**0.50**
GLF2518Type	**2.50**	**1.80**	**1.80**	**0.60**	**0.60**
GLF201208Type	**2.00**	**1.25**	**0.80**	**0.45**	**0.45**
GLF251812Type	**2.50**	**1.80**	**1.25**	**0.50**	**0.50**
GLC2518Type	**2.50**	**1.80**	**1.80**	**0.60**	**0.60**

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Electrical Characteristics [GLF1608Type]

ITEM	Inductance & Tolerance	Rdc[ohm] ±30%	Idc[mA	
			L:10%Down Max.	L:20%Dow Max.
GLF1608T1R0M	1.0µH±20%	0.17	125	220
GLF1608T2R2M	2.2µH±20%	0.33	85	160
GLF1608T4R7M	4.7µH±20%	0.55	70	115
GLF1608T100M	10µH±20%	0.70	50	90
GLF1608T220M	22µH±20%	3.00	35	60

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Electrical Characteristics [GLF2012Type]

ITEM	Inductance & Tolerance	Rdc[ohm] ±30%	Idc[mA	
			L:10%Down Max.	L:20%Dow Max.
GLF2012T1R0M	1.0µH±20%	0.07	275	400
GLF2012T2R2M	2.2µH±20%	0.10	210	300
GLF2012T4R7M	4.7µH±20%	0.24	120	200
GLF2012T100K	10µH±10%	0.36	100	140
GLF2012T220K	22µH±10%	1.00	75	100
GLF2012T470K	47µH±10%	1.70	50	75
GLF2012T101K	100µH±10%	4.00	30	50

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Electrical Characteristics [GLF2518Type]

ITEM	Inductance & Tolerance	Rdc[ohm]	Idc[mA	
			L:10%Down Max.	L:20%Dow Max.
GLF2518T1R0M	1.0µH±20%	0.05±30%	500	675
GLF2518T2R2M	2.2µH±20%	0.08±30%	340	450
GLF2518T4R7M	4.7µH±20%	0.11±30%	240	320
GLF2518T100K	10µH±10%	0.20±20%	165	210
GLF2518T220K	22µH±10%	0.45±20%	115	150
GLF2518T470K	47µH±10%	0.85±20%	85	100
GLF2518T101K	100µH±10%	1.90±20%	55	75

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Electrical Characteristics [GLF201208Type]

ITEM	Inductance & Tolerance	Rdc[ohm]	Idc[mA	
			L:10%Down Max.	L:20%Dow Max.
GLF201208T1R0M	1.0µH±20%	0.19±20%	340	460
GLF201208T2R2M	2.2µH±20%	0.56±20%	220	300
GLF201208T4R7M	4.7µH±20%	0.74±20%	160	230
GLF201208T100M	10µH±20%	1.10±20%	130	170
GLF201208T220M	22µH±20%	3.50±20%	80	110
GLF201208T470M	47µH±20%	5.30±20%	60	90

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Electrical Characteristics [GLF251812Type]

ITEM	Inductance & Tolerance	Rdc[ohm]	Idc[mA	
			L:10%Down Max.	L:20%Dow Max.
GLF251812T1R0M	1.0µH±20%	0.10±20%	650	800
GLF251812T2R2M	2.2µH±20%	0.20±20%	450	600
GLF251812T4R7M	4.7µH±20%	0.38±20%	275	450
GLF251812T100M	10µH±20%	0.60±20%	200	325
GLF251812T220M	22µH±20%	1.20±20%	140	250
GLF251812T470M	47µH±20%	2.50±20%	100	175
GLF251812T101M	100µH±20%	4.70±20%	80	125

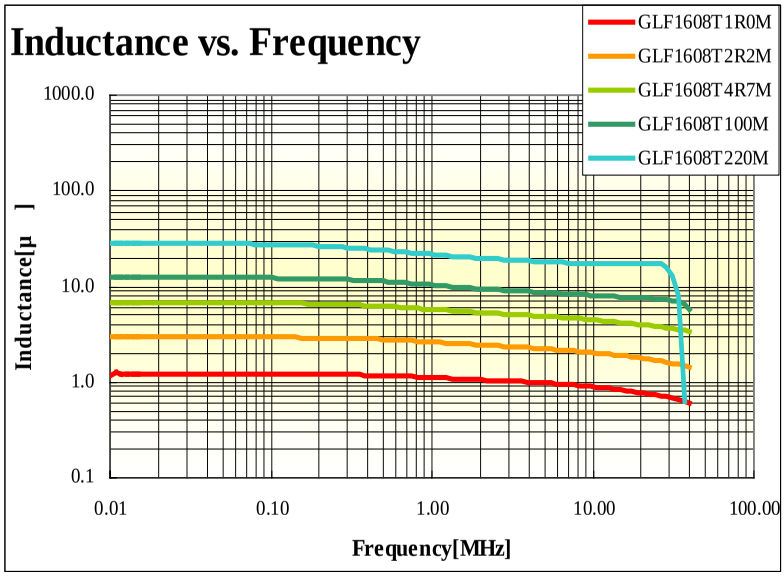
Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

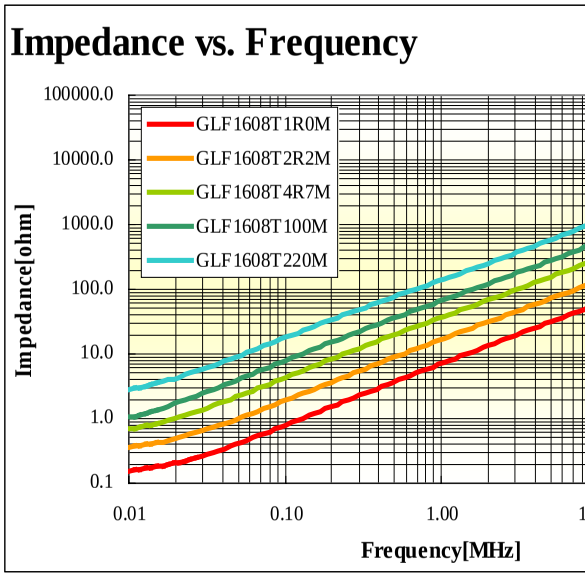
Electrical Characteristics [GLC2518Type]

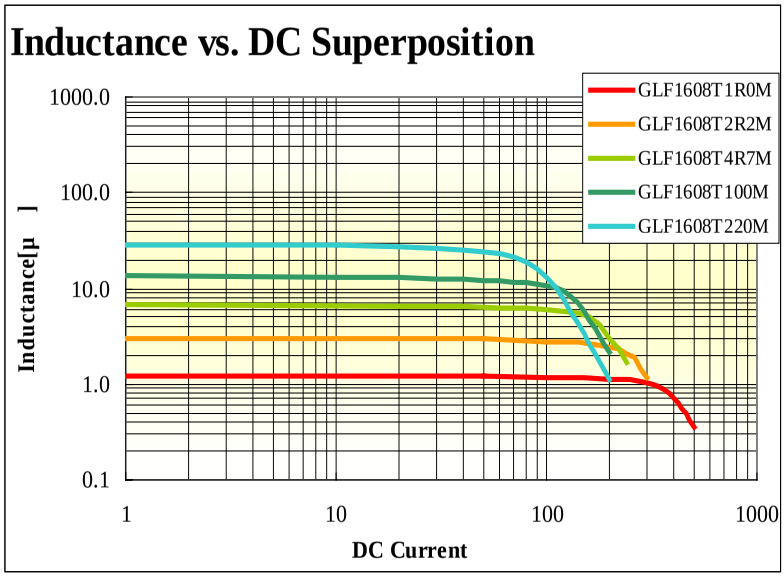
ITEM	Inductance & Tolerance	Rdc[ohm]	Idc[mA	
			L:10%Down Max.	L:20%Dow Max.
GLC2518T1R0M	1.0µH±20%	0.08±30%	850	-----
GLC2518T2R2M	2.2µH±20%	0.13±30%	650	-----
GLC2518T4R7M	4.7µH±20%	0.20±30%	475	-----
GLC2518T100K	10µH±10%	0.36±20%	350	-----
GLC2518T220K	22µH±10%	0.90±20%	225	-----
GLC2518T470K	47µH±10%	1.90±20%	170	-----
GLC2518T101K	100µH±10%	3.50±20%	110	-----

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Typical Electrical Characteristics [GLF1608Type]

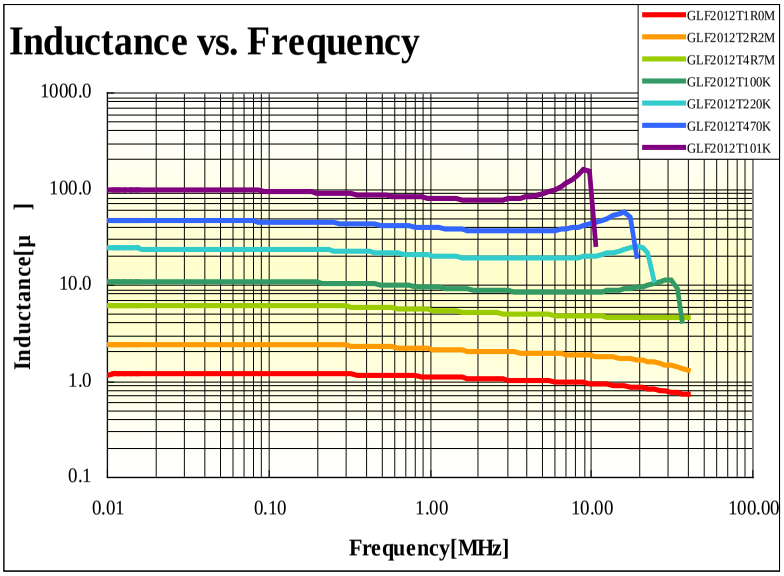


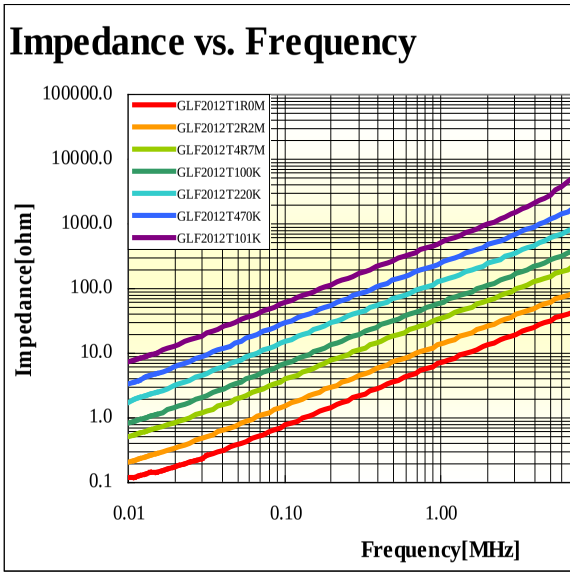


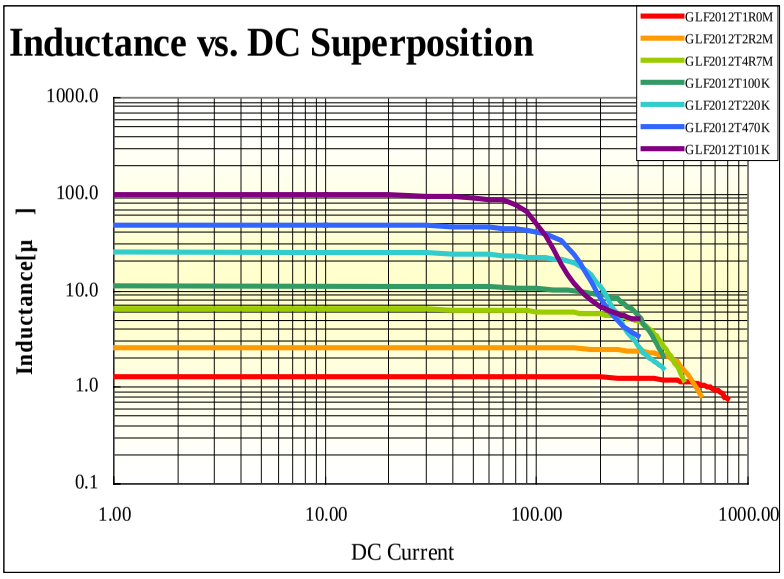


Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Typical Electrical Characteristics [GLF2012Type]

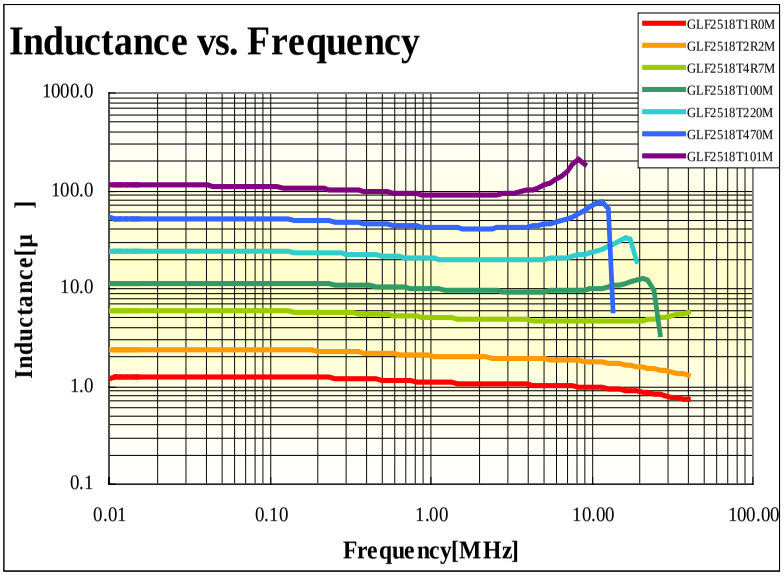


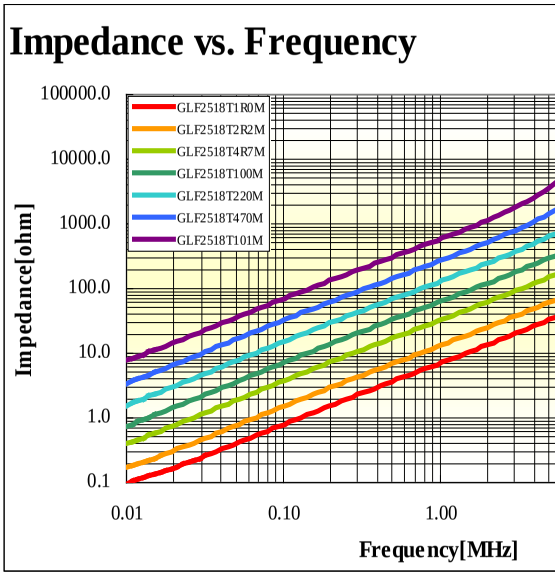


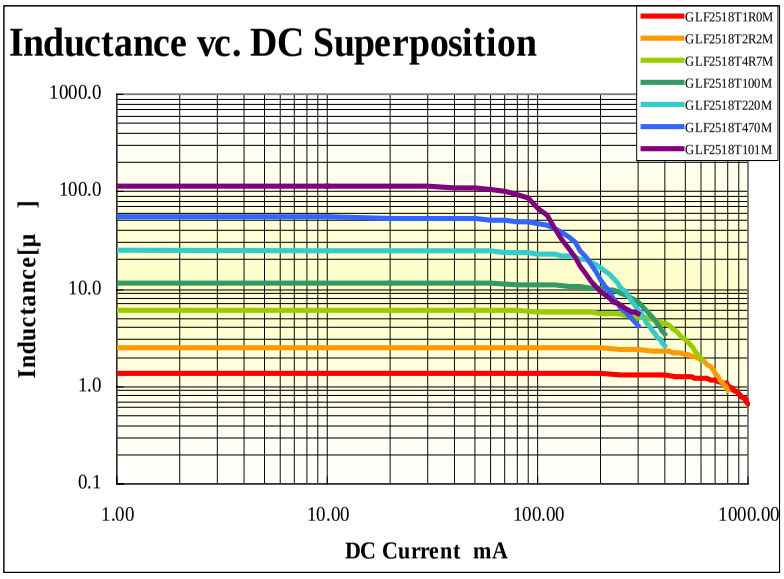


Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Typical Electrical Characteristics [GLF2518Type]

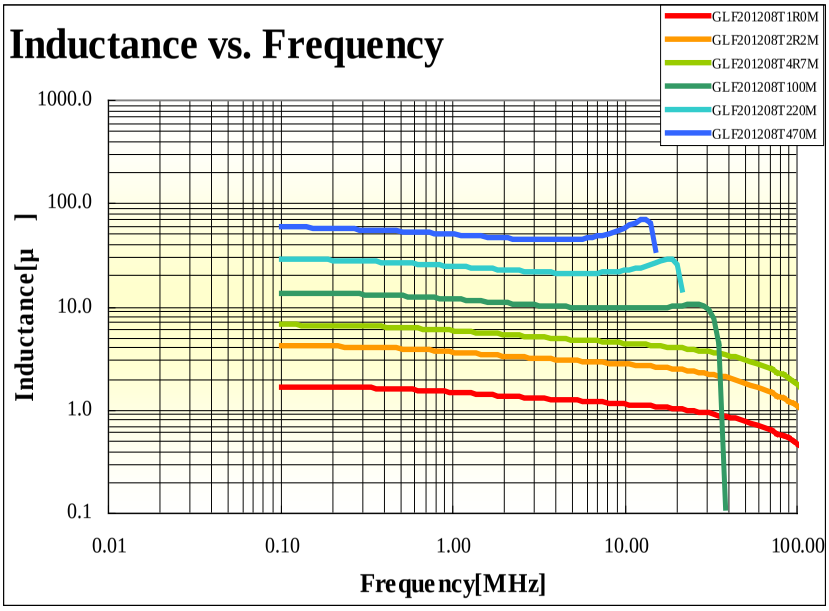


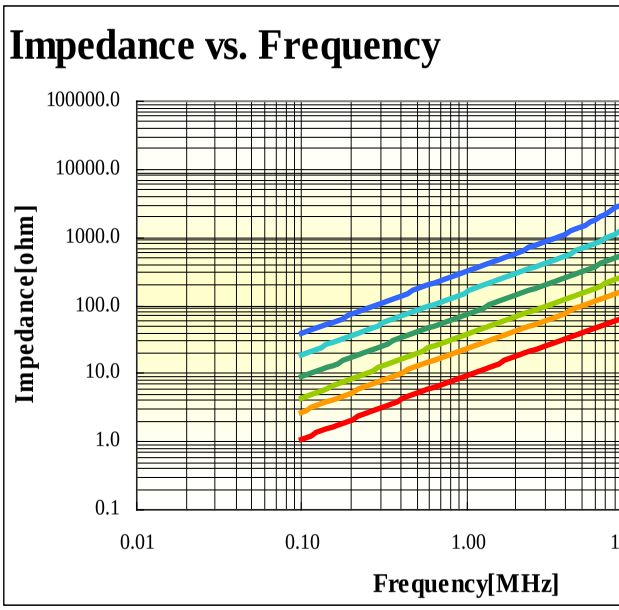


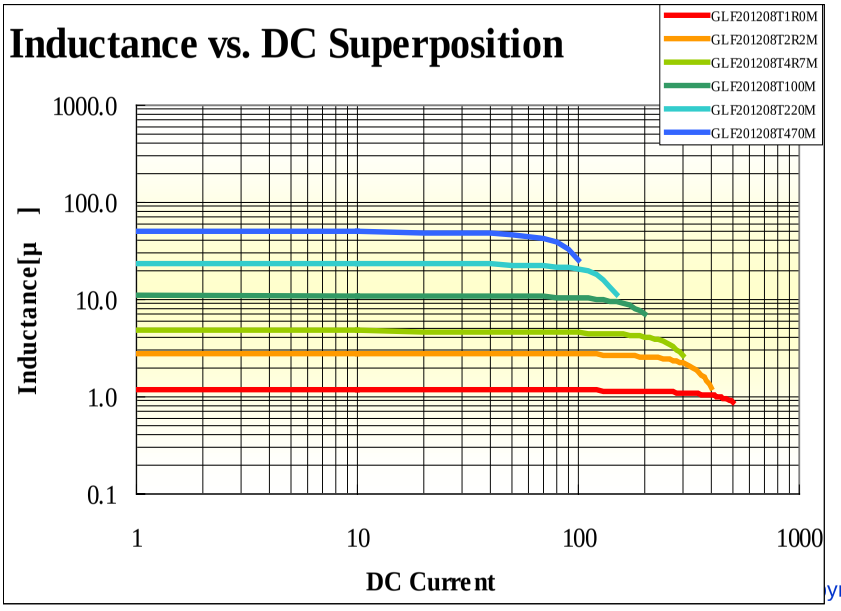


Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Typical Electrical Characteristics [GLF201208Type]

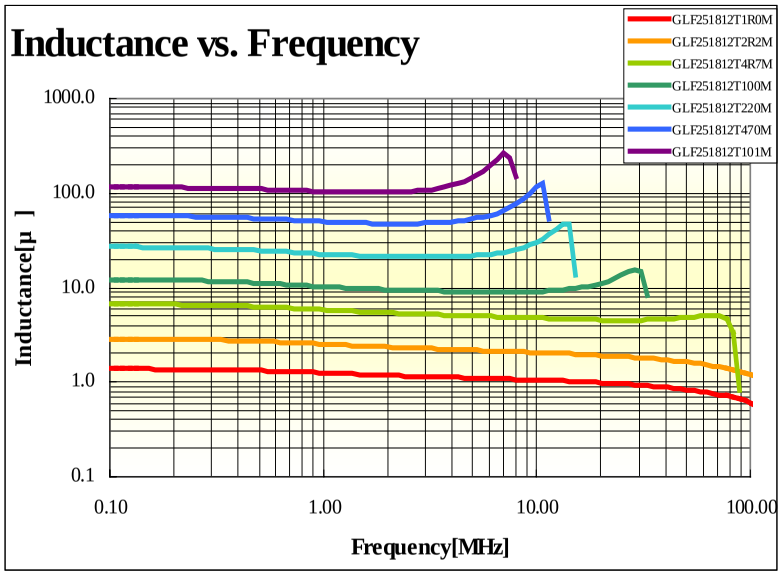


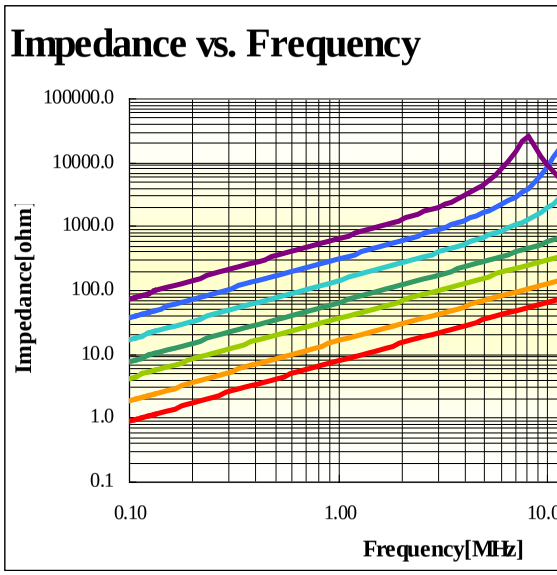


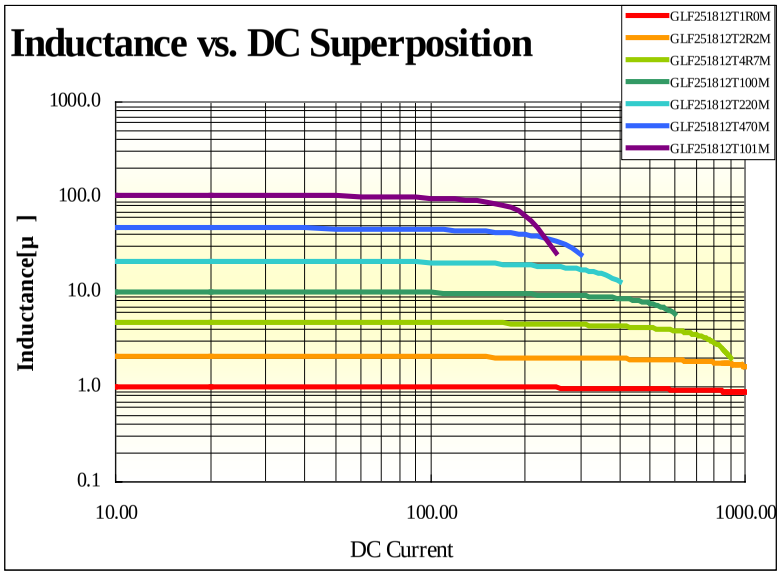


yright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Typical Electrical Characteristics [GLF251812Type]

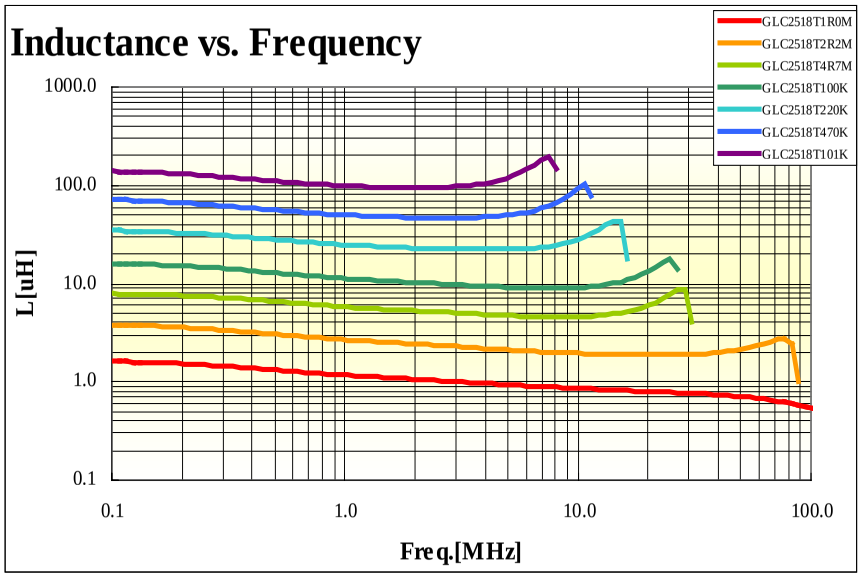


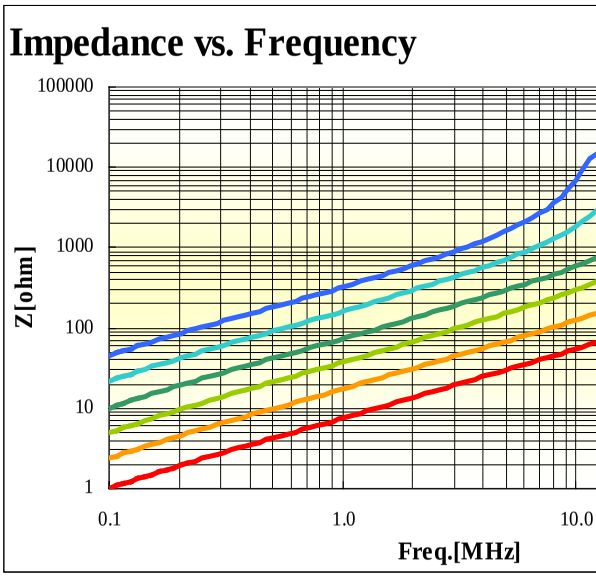


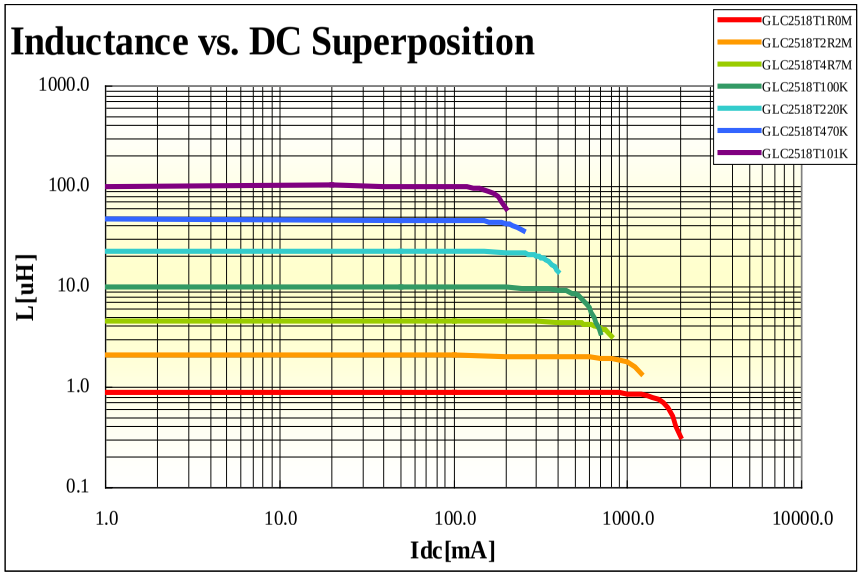


Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Typical Electrical Characteristics [GLC2518Type]







Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

GLF & GLC Series Basic Information

Ratings

Temperature rise:	**20C° max.**
Storage temperature range:	**-40C° to 105C°**
Operating temperature range:	**-20C° to 105C°**

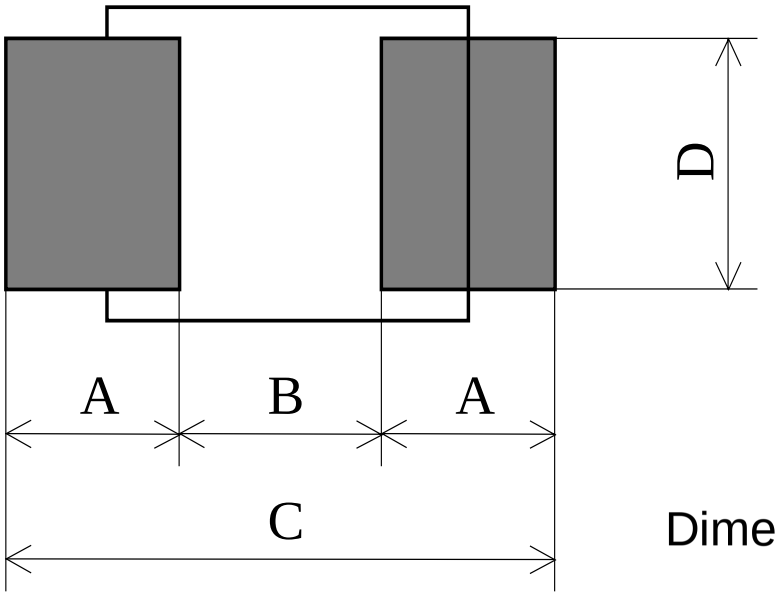
Country of origin

Japan

(TDK Shonai Manufacturing Corporation/Yamagata)

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

The Recommended Land Pattern

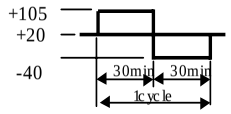


Dimension in [mm

	A [mm]	B [mm]	C [mm]	D [mm]
GLF1608Type	**0.70**	**0.70**	**2.10**	**0.70**
GLF2012Type **GLF201208Type**	**0.80**	**1.00**	**2.60**	**0.80**
GLF2518Type **GLF251812Type** **GLC2518Type**	**0.90**	**1.30**	**3.10**	**1.60**

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

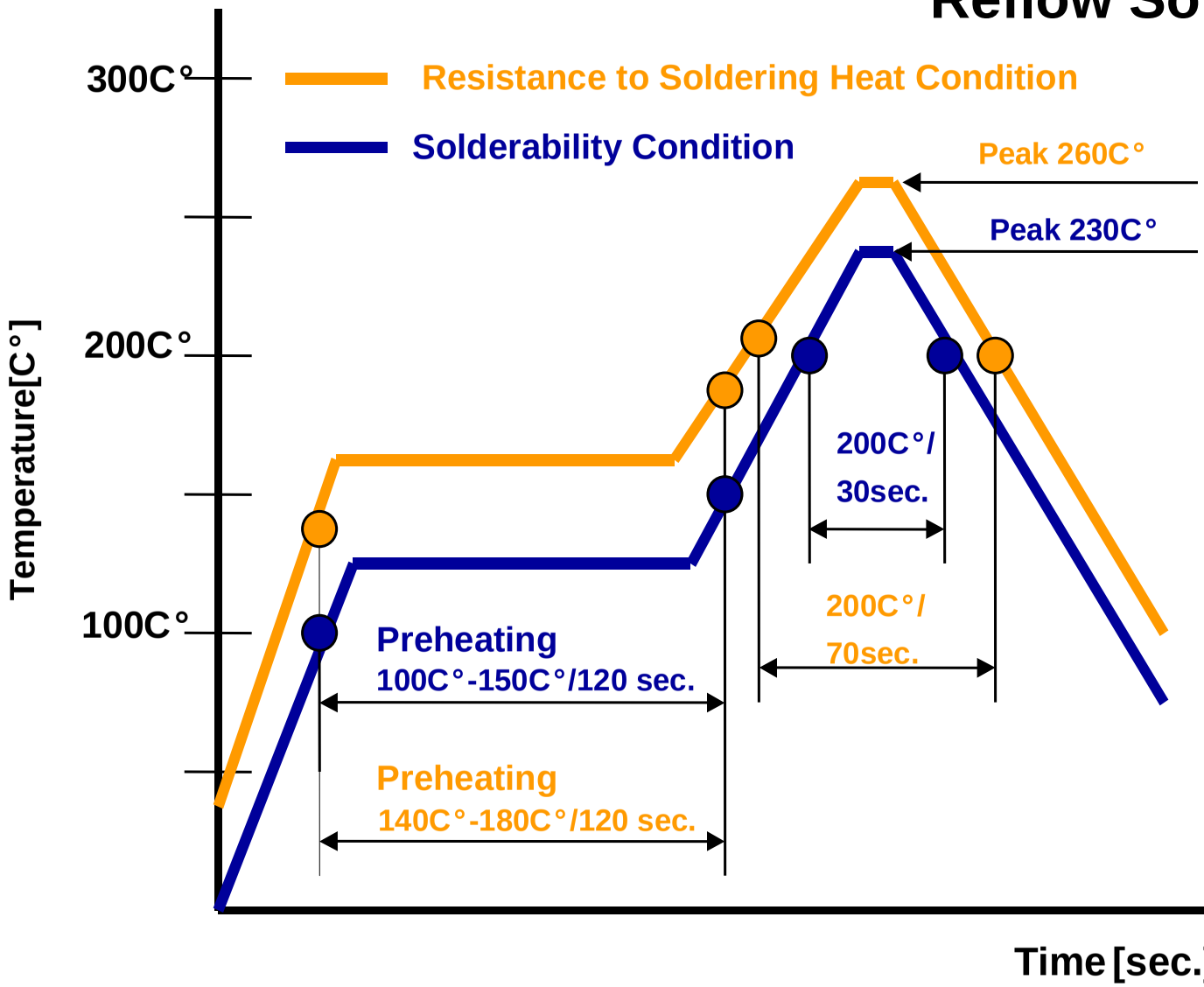
Reliability requirements

Test Item	Test Condition	Specification	T
Temperature characteristics	The test shall be performed after the sample has stabilized in an ambient temperature of -40 to +105 ,and the value calculated based on the value applicable in a normal temperature of +20 .	L_{20} ±10%	L Avg. Max. Min.
Thermal shock	The test shall be performed upon completion of 100 cycles in accordance with the conditions in the figure below, the measurement shall be made after the sample has been left in a normal temperature and normal humidity more than 12hours. 	No mechanical damege. L/Lo ±10%	L Avg. Max. Min.
Low temperature storage	This test shall be performed upon completion of 1000±12hours in an atmosphere with a temperature of -40±2 Upon completion of the test, the measurement shall be made after The sample has been left in a normal temperature and normal humidity more than 12hours.	No mechanical damege. L/Lo ±10%	L Avg. Max. Min.
Continuous operation in high temperature	The sample shall be left for 1000±12hours in an atmosphere with a temperature of +105±2 , under supplying rated current.Upon completion of the test, the measurement shall be made after the sample has been left in a normal temperature and normal humidiy more than 12hours.	No mechanical damege. L/Lo ±10%	L Avg. Max. Min.
Continuous operation in moisture	The sample shall be left for 1000±12hours in an atmosphere with a temperature of +60±3 and a humidity(RH)of 90-95%,under supplying rated current.Upon completion of the test,the measurement shall be made after the sample has been left in a normal temprature and normal humidity mora than 12hours. 12hours.	No mechanical damege. L/Lo ±10%	L Avg. Max. Min.

Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

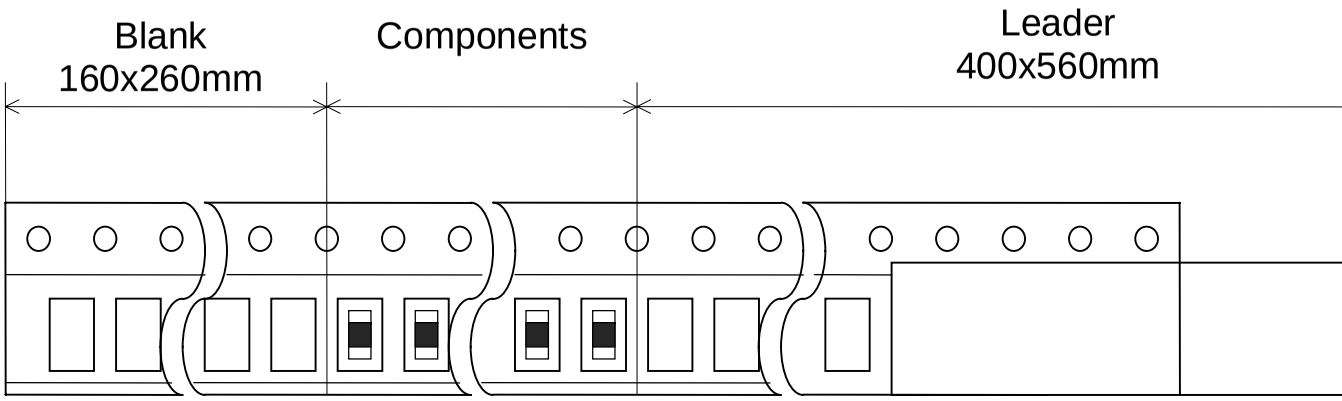
Recommended Soldering Conditions

Reflow So



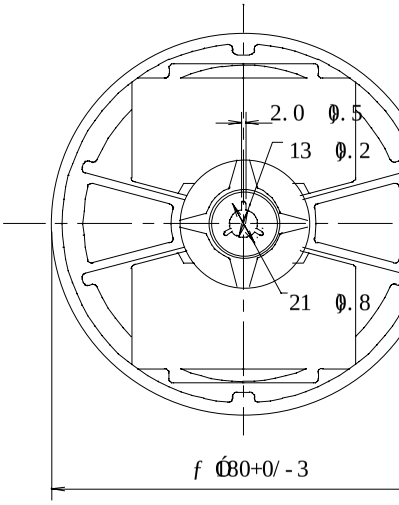
Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Technical Part and Leader Part Tape



	Packing number
GLF1608Type **GLF201208Type**	**4,000pieces**
GLF2012Type **GLF2518Type** **GLF251812Type** **GLC2518Type**	**2,000pieces**

Reel Dimensio



Copyright 2004 by TDK Electronics Europe GmbH. All rights reserved.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View GLF2012T1R0M on WIN SOURCE
- TDK Corporation Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management