

### Multilayer Chip Inductors

#### FEATURES

- Internal printed coil structure creates a closed magnetic circuit which acts as a magnetic shield eliminating cross talk, thus permitting higher mounting densities.
- Multilayer block structure yields higher reliability.

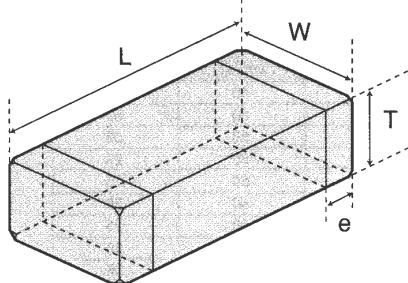
#### RECOMMENDED APPLICATIONS

- Any general circuit of portable equipment which compact size and high mounting densities are required.



Operating Temperature: -40~85°C

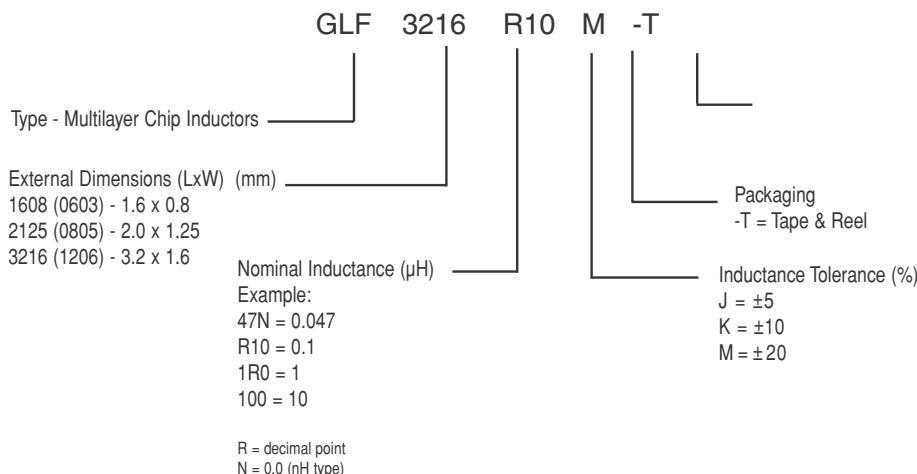
#### EXTERNAL DIMENSIONS



Type	L	W	T	e
GLF1608 (0603)	1.6±0.15 (0.063±0.006)	0.8±0.15 (0.031±0.006)	0.8±0.15 (0.031±0.006)	0.3±0.2 (0.012±0.008)
GLF2125 (0805)	2.0 <sup>+0.3</sup> -0.1 (0.079 <sup>+0.012</sup> -0.004)	1.25±0.2 (0.049±0.008)	1.25±0.2 (0.033±0.008) (0.049±0.008)	0.5±0.3 (0.020±0.012)
GLF3216 (1206)	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	0.6±0.2 1.1±0.3 (0.024±0.008) (0.043±0.012)	0.5±0.3 (0.020±0.012)

Inductance	I <sub>max</sub> [mA]	R <sub>dcmx</sub> [Ω]	I <sub>max</sub> [mA]	R <sub>dcmx</sub> [Ω]	I <sub>max</sub> [mA]	R <sub>dcmx</sub> [Ω]
0.1µH	50	0.50	250	0.30	250	0.25
1µH	25	0.60	50	0.40	100	0.40
10µH	5	2.55	15	1.15	25	1.00

#### ORDERING CODE



### Multilayer Chip Inductors - GLF1608

Part No.	Inductance ( $\mu$ H)	Inductance Tolerance	Q (min.)	Self Resonant frequency [MHz] (min.)	DC Resistance [ $\Omega$ ] (max.)	Related Current [mA] (max.)	Measuring Frequency [MHz]	Thickness [mm] (inch)
GLF1608 47NM□	0.047	$\pm 5\%$	10	260	0.30	50	50	0.8 $\pm$ 0.15 (0.031 $\pm$ 0.006)
GLF1608 68NM□	0.068		10	250	0.30	50	50	
GLF1608 82NM□	0.082		10	245	0.30	50	50	
GLF1608 R10□	0.10		15	240	0.50	50	25	
GLF1608 R12□	0.12		15	205	0.50	50	25	
GLF1608 R15□	0.15		15	180	0.60	50	25	
GLF1608 R18□	0.18		15	165	0.60	50	25	
GLF1608 R22□	0.22		15	150	0.80	50	25	
GLF1608 R27□	0.27		15	136	0.80	50	25	
GLF1608 R33□	0.33		15	125	0.85	35	25	
GLF1608 R39□	0.39		15	110	1.00	35	25	
GLF1608 R47□	0.47		15	105	1.35	35	25	
GLF1608 R56□	0.56		15	95	1.55	35	25	
GLF1608 R68□	0.68		15	80	1.70	35	25	
GLF1608 R82□	0.82		15	75	2.10	35	25	
GLF1608 1R0□	1.0		35	70	0.60	25	10	
GLF1608 1R2□	1.2		35	60	0.80	25	10	
GLF1608 1R5□	1.5		35	55	0.80	25	10	
GLF1608 1R8□	1.8		35	50	0.95	25	10	
GLF1608 2R2□	2.2		35	45	1.15	15	10	
GLF1608 2R7□	2.7		35	40	1.35	15	10	
GLF1608 3R3□	3.3		35	38	1.55	15	10	
GLF1608 3R9□	3.9		35	36	1.70	15	10	
GLF1608 4R7□	4.7		35	33	2.10	15	10	
GLF1608 5R6□	5.6		35	22	1.55	5	4	
GLF1608 6R8□	6.8		35	20	1.70	5	4	
GLF1608 8R2□	8.2		35	18	2.10	5	4	
GLF1608 100□	10		35	17	2.55	5	2	
GLF1608 120□	12		35	15	2.75	5	2	
GLF1608 150M□	15	$\pm 10\%$	20	14	1.70	1	1	
GLF1608 180M□	18		20	13	1.85	1	1	
GLF1608 220M□	22		20	11	2.10	1	1	
GLF1608 270M□	27		20	10	2.75	1	1	
GLF1608 330M□	33		20	9	2.95	1	1	

□ Please specify the Inductance Tolerance Code (J, K, or M).

**Note:** Values from .0012 $\mu$ H to .039 $\mu$ H are available  
please consult factory.

### Multilayer Chip Inductors - GLF2125

Part No.	Inductance ( $\mu$ H)	Inductance Tolerance	Q (min.)	Self Resonant frequency [MHz] (min.)	DC Resistance [ $\Omega$ ] (max.)	Related Current [mA] (max.)	Measuring Frequency [MHz]	Thickness [mm] (inch)
GLF2125 47NM□	0.047	$\pm 5\%$	15	320	0.20	300	50	0.85 $\pm 0.2$ (0.033 $\pm 0.008$ )
GLF2125 68NM□	0.068		15	280	0.20	300	50	
GLF2125 82NM□	0.082		15	255	0.20	300	50	
GLF2125 R10□	0.10		20	235	0.30	250	25	
GLF2125 R12□	0.12		20	220	0.30	250	25	
GLF2125 R15□	0.15		20	200	0.40	250	25	
GLF2125 R18□	0.18		20	185	0.40	250	25	
GLF2125 R22□	0.22		20	170	0.50	250	25	
GLF2125 R27□	0.27		20	150	0.50	250	25	
GLF2125 R33□	0.33		20	145	0.55	250	25	
GLF2125 R39□	0.39		25	135	0.65	200	25	
GLF2125 R47□	0.47		25	125	0.65	200	25	
GLF2125 R56□	0.56	$\pm 10\%$	25	115	0.75	150	25	1.25 $\pm 0.2$ (0.049 $\pm 0.008$ )
GLF2125 R68□	0.68		25	105	0.80	150	25	
GLF2125 R82□	0.82		25	100	1.00	150	25	
GLF2125 1R0□	1.0		45	75	0.40	50	10	
GLF2125 1R2□	1.2		45	65	0.50	50	10	
GLF2125 1R5□	1.5		45	60	0.50	50	10	
GLF2125 1R8□	1.8		45	55	0.60	50	10	
GLF2125 2R2□	2.2		45	50	0.65	30	10	
GLF2125 2R7□	2.7		45	45	0.75	30	10	
GLF2125 3R3□	3.3		45	41	0.80	30	10	
GLF2125 3R9□	3.9		45	38	0.90	30	10	
GLF2125 4R7□	4.7		45	35	1.00	30	10	
GLF2125 5R6□	5.6	$\pm 20\%$	50	32	0.90	15	4	0.85 $\pm 0.2$ (0.033 $\pm 0.008$ )
GLF2125 6R8□	6.8		50	29	1.00	15	4	
GLF2125 8R2□	8.2		50	26	1.10	15	4	
GLF2125 100□	10		50	24	1.15	15	2	
GLF2125 120□	12		50	22	1.25	15	2	
GLF2125 150M□	15		30	19	0.80	5	1	
GLF2125 180M□	18		30	18	0.90	5	1	
GLF2125 220M□	22		30	16	1.10	5	1	
GLF2125 270M□	27		30	14	1.15	5	1	
GLF2125 330M□	33		30	13	1.25	5	0.4	

Please specify the Inductance Tolerance Code (J, K, or M).

**Note:** Values from .0027 $\mu$ H to .039 $\mu$ H are available  
please consult factory.

### Multilayer Chip Inductors - GLF3216

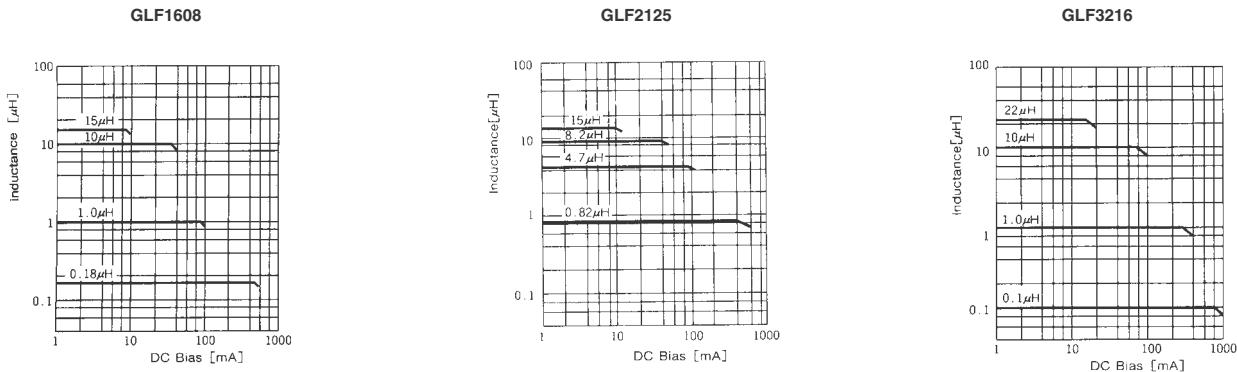
Part No.	Inductance ( $\mu$ H)	Inductance Tolerance	Q (min.)	Self Resonant frequency [MHz] (min.)	DC Resistance [ $\Omega$ ] (max.)	Related Current [mA] (max.)	Measuring Frequency [MHz]	Thickness [mm] (inch)
GLF3216 47NM□	0.047	$\pm 10\%$	20	320	0.15	300	50	$0.6 \pm 0.2$ ( $0.024 \pm 0.008$ )
GLF3216 68NM□	0.068		20	280	0.25	300	50	
GLF3216 R10□	0.10	$\pm 20\%$	20	235	0.25	250	25	$1.1 \pm 0.3$ ( $0.043 \pm 0.012$ )
GLF3216 R12□	0.12		20	220	0.30	250	25	
GLF3216 R15□	0.15		20	200	0.30	250	25	
GLF3216 R18□	0.18		20	185	0.40	250	25	
GLF3216 R22□	0.22		20	170	0.40	250	25	
GLF3216 R27□	0.27		20	150	0.50	250	25	
GLF3216 R33□	0.33		20	145	0.60	250	25	
GLF3216 R39□	0.39		25	135	0.50	200	25	
GLF3216 R47□	0.47		25	125	0.60	200	25	
GLF3216 R56□	0.56		25	115	0.70	150	25	
GLF3216 R68□	0.68		25	105	0.80	150	25	
GLF3216 R82□	0.82		25	100	1.90	150	25	
GLF3216 1R0□	1.0		45	75	0.40	100	10	$0.6 \pm 0.2$ ( $0.024 \pm 0.008$ )
GLF3216 1R2□	1.2		45	65	0.50	100	10	
GLF3216 1R5□	1.5		45	60	0.50	50	10	
GLF3216 1R8□	1.8		45	55	0.50	50	10	
GLF3216 2R2□	2.2		45	50	0.60	50	10	
GLF3216 2R7□	2.7		45	45	0.60	50	10	
GLF3216 3R3□	3.3		45	41	0.70	50	10	
GLF3216 3R9□	3.9		45	38	0.80	50	10	
GLF3216 4R7□	4.7		45	35	0.90	50	10	
GLF3216 5R6□	5.6		50	32	0.70	25	4	$1.1 \pm 0.3$ ( $0.043 \pm 0.012$ )
GLF3216 6R8□	6.8		50	29	0.80	25	4	
GLF3216 8R2□	8.2		50	26	0.90	25	4	
GLF3216 100□	10		50	24	1.00	25	2	
GLF3216 120□	12		50	22	1.05	15	2	
GLF3216 150M□	15	$\pm 10\%$	35	19	0.70	5	1	
GLF3216 180M□	18		35	18	0.70	5	1	
GLF3216 220M□	22		35	16	0.90	5	1	
GLF3216 270M□	27		35	14	0.90	5	1	
GLF3216 330M□	33		35	13	1.05	5	0.4	

Please specify the Inductance Tolerance Code (K or M).

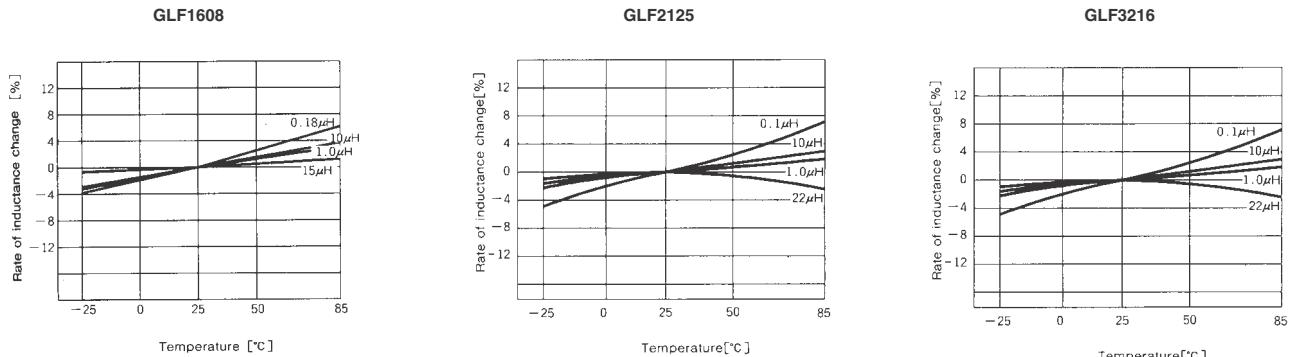
### Multilayer Chip Inductors

#### ELECTRICAL CHARACTERISTICS

Typical DC Bias Characteristics (measured by HP4194A)



Typical Temperature Characteristics (measured by HP4275A)



Typical Q vs Frequency Characteristics (measured by HP4195A & 41951A)

