

**FEATURES**

- High heat resistance and excellent solderability.
- Excellent terminal strength construction.
- Magnetically shielded construction.
- Surface mount inductor with high current rating.



**APPLICATIONS**

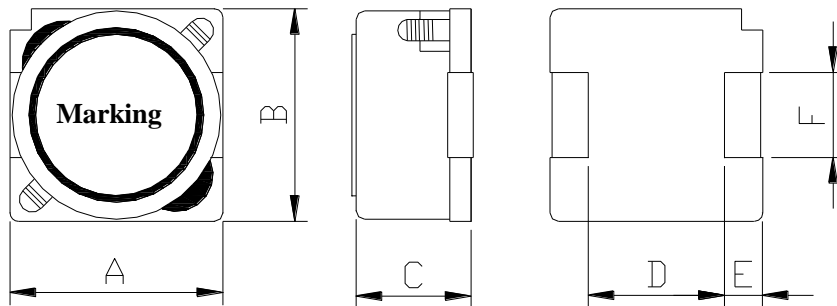
- Ideally used in Digital camera, notebook PC, LCD/LED TV set, DC-DC Converters, etc.

**Product Identification**

MGSL      0755 - 100      M : LF  
 ①              ②              ③              ④              ⑤

- ① **Series Name**
- ② **Product Dimensions**
- ③ **Inductance Value:** (100: 10uH; 101:100uH)
- ④ **Inductance Tolerance:** (M:20% N:30%)
- ⑤ **Lead Free Products**

**Shapes and Dimensions**



Series	Dimensions(mm)					
	A	B	C Max.	D typ.	E Ref.	F
MGSL0628	6.0±0.3	6.0±0.3	3.0	4.0	0.9	2.0±0.1
MGSL0645	6.0±0.3	6.0±0.3	4.8	4.0	0.9	2.0±0.1
MGSL0745	7.0±0.3	7.0±0.3	4.8	4.9	0.9	2.0±0.1
MGSL0755	7.0±0.3	7.0±0.3	5.8	4.9	0.9	2.0±0.1
MGSL10145	10.1±0.3	10.1±0.3	4.8	6.0	2.0	3.0±0.1
MGSL12555	12.5±0.3	12.5±0.3	5.8	8.5	2.0	3.0±0.1

## Electrical Characteristics

## MGSL0628 Series

Part Number	L (uH)	Tolerance	Test freq. (KHz)	DCR max. ( mΩ)	Isat Max. (A)
MGSL0628-4R7 □-LF	4.70	±20%,30%	100	35	1.60
MGSL0628-6R8 □-LF	6.80	±20%,30%	100	43	1.50
MGSL0628-100 □-LF	10.0	±20%,30%	100	64	1.30
MGSL0628-150 □-LF	15.0	±20%,30%	100	90	1.00
MGSL0628-220 □-LF	22.0	±20%,30%	100	125	0.70
MGSL0628-330 □-LF	33.0	±20%,30%	100	178	0.69
MGSL0628-470 □-LF	47.0	±20%,30%	100	252	0.59
MGSL0628-680 □-LF	68.0	±20%,30%	100	348	0.50
MGSL0628-101 □-LF	100	±20%,30%	100	516	0.42

## MGSL0645 Series

Part Number	L (uH)	Tolerance	Test freq. (KHz)	DCR max. ( mΩ)	Isat Max. (A)
MGSL0645-1R0 □-LF	1.00	±20%,30%	100	23	2.70
MGSL0645-1R5 □-LF	1.50	±20%,30%	100	26	2.30
MGSL0645-2R2 □-LF	2.20	±20%,30%	100	28	1.90
MGSL0645-3R3 □-LF	3.30	±20%,30%	100	35	1.80
MGSL0645-4R7 □-LF	4.70	±20%,30%	100	40	1.40
MGSL0645-6R8 □-LF	6.80	±20%,30%	100	45	1.20
MGSL0645-100 □-LF	10.0	±20%,30%	100	60	1.00
MGSL0645-120 □-LF	12.0	±20%,30%	100	65	0.90
MGSL0645-150 □-LF	15.0	±20%,30%	100	70	0.80
MGSL0645-180 □-LF	18.0	±20%,30%	100	90	0.70
MGSL0645-220 □-LF	22.0	±20%,30%	100	110	0.65
MGSL0645-270 □-LF	27.0	±20%,30%	100	138	0.60
MGSL0645-330 □-LF	33.0	±20%,30%	100	165	0.55
MGSL0645-390 □-LF	39.0	±20%,30%	100	195	0.50
MGSL0645-470 □-LF	47.0	±20%,30%	100	220	0.45
MGSL0645-560 □-LF	56.0	±20%,30%	100	255	0.40
MGSL0645-680 □-LF	68.0	±20%,30%	100	285	0.37
MGSL0645-820 □-LF	82.0	±20%,30%	100	365	0.33
MGSL0645-101 □-LF	100	±20%,30%	100	420	0.30

\*Rated Current: it is either the inductance is 10% lower than its nominal value in D.C. saturation characteristics or temperature rise becomes  $\Delta T=40^{\circ}\text{C}$ , whichever is lower.

## Electrical Characteristics

## MGSL0745 Series

Part Number	L ( $\mu$ H)	Tolerance	Test freq. (KHz)	DCR max. (m $\Omega$ )	Rated Current (A)
MGSL0745-3R3 □-LF	3.30	$\pm 20\%, 30\%$	100	24	2.50
MGSL0745-4R7 □-LF	4.70	$\pm 20\%, 30\%$	100	36	2.00
MGSL0745-6R8 □-LF	6.80	$\pm 20\%, 30\%$	100	47	1.70
MGSL0745-100 □-LF	10.0	$\pm 20\%, 30\%$	100	55	1.30
MGSL0745-150 □-LF	15.0	$\pm 20\%, 30\%$	100	62	1.10
MGSL0745-220 □-LF	22.0	$\pm 20\%, 30\%$	100	73	0.90
MGSL0745-330 □-LF	33.0	$\pm 20\%, 30\%$	100	115	0.82
MGSL0745-470 □-LF	47.0	$\pm 20\%, 30\%$	100	150	0.75
MGSL0745-680 □-LF	68.0	$\pm 20\%, 30\%$	100	210	0.60
MGSL0745-101 □-LF	100	$\pm 20\%, 30\%$	100	300	0.50
MGSL0745-151 □-LF	150	$\pm 20\%, 30\%$	100	408	0.40
MGSL0745-221 □-LF	220	$\pm 20\%, 30\%$	100	624	0.33
MGSL0745-331 □-LF	330	$\pm 20\%, 30\%$	100	888	0.25
MGSL0745-471 □-LF	470	$\pm 20\%, 30\%$	100	1260	0.22
MGSL0745-681 □-LF	680	$\pm 20\%, 30\%$	100	1776	0.20
MGSL0745-102 □-LF	1000	$\pm 20\%, 30\%$	100	2736	0.14

## MGSL0755 Series

Part Number	L ( $\mu$ H)	Tolerance	Test freq. (KHz)	DCR max. (m $\Omega$ )	Rated Current (A)
MGSL0755-1R0 □-LF	1.00	$\pm 20\%, 30\%$	100	19	7.00
MGSL0755-1R8 □-LF	1.80	$\pm 20\%, 30\%$	100	23	6.00
MGSL0755-2R2 □-LF	2.20	$\pm 20\%, 30\%$	100	29	4.80
MGSL0755-4R7 □-LF	4.70	$\pm 20\%, 30\%$	100	37	3.30
MGSL0755-100 □-LF	10.0	$\pm 20\%, 30\%$	100	47	2.50
MGSL0755-150 □-LF	15.0	$\pm 20\%, 30\%$	100	61	2.20
MGSL0755-220 □-LF	22.0	$\pm 20\%, 30\%$	100	72	1.70
MGSL0755-330 □-LF	33.0	$\pm 20\%, 30\%$	100	105	1.40
MGSL0755-470 □-LF	47.0	$\pm 20\%, 30\%$	100	156	1.20
MGSL0755-680 □-LF	68.0	$\pm 20\%, 30\%$	100	240	1.00
MGSL0755-101 □-LF	100	$\pm 20\%, 30\%$	100	352	0.70
MGSL0755-221 □-LF	220	$\pm 20\%, 30\%$	100	660	0.55

\*Rated Current: it is either the inductance is 10% lower than its nominal value in D.C. saturation characteristics or temperature rise becomes  $\Delta T=40^\circ\text{C}$ , whichever is lower.

## Electrical Characteristics

## MGSL10145 Series

Part Number	L (uH)	Tolerance	Test freq. (KHz)	DCR max. (m Ω)	Rated Current (A)
MGSL10145-3R3 □-LF	3.30	±20%,30%	1	20	4.90
MGSL10145-5R6 □-LF	5.60	±20%,30%	1	27	3.80
MGSL10145-100 □-LF	10.0	±20%,30%	1	44	3.00
MGSL10145-150 □-LF	15.0	±20%,30%	1	57	2.40
MGSL10145-220 □-LF	22.0	±20%,30%	1	71	2.10
MGSL10145-330 □-LF	33.0	±20%,30%	1	98	1.60
MGSL10145-470 □-LF	47.0	±20%,30%	1	121	1.40
MGSL10145-680 □-LF	68.0	±20%,30%	1	168	1.20
MGSL10145-101 □-LF	100	±20%,30%	1	240	1.00
MGSL10145-151 □-LF	150	±20%,30%	1	420	0.79
MGSL10145-221 □-LF	220	±20%,30%	1	564	0.65
MGSL10145-331 □-LF	330	±20%,30%	1	816	0.54
MGSL10145-471 □-LF	470	±20%,30%	1	1236	0.47
MGSL10145-681 □-LF	680	±20%,30%	1	1920	0.38
MGSL10145-102 □-LF	1000	±20%,30%	1	3360	0.32

## MGSL12555 Series

Part Number	L (uH)	Tolerance	Test freq. (KHz)	DCR max. (m Ω)	Rated Current (A)
MGSL12555-3R3 □-LF	3.30	±20%,30%	1	16	4.00
MGSL12555-5R6 □-LF	5.60	±20%,30%	1	20	3.60
MGSL12555-100 □-LF	10.0	±20%,30%	1	26	3.40
MGSL12555-150 □-LF	15.0	±20%,30%	1	32	2.80
MGSL12555-220 □-LF	22.0	±20%,30%	1	41	2.30
MGSL12555-330 □-LF	33.0	±20%,30%	1	50	1.90
MGSL12555-470 □-LF	47.0	±20%,30%	1	75	1.60
MGSL12555-680 □-LF	68.0	±20%,30%	1	100	1.30
MGSL12555-101 □-LF	100	±20%,30%	1	140	1.10
MGSL12555-151 □-LF	150	±20%,30%	1	228	0.88
MGSL12555-221 □-LF	220	±20%,30%	1	324	0.72
MGSL12555-331 □-LF	330	±20%,30%	1	492	0.59
MGSL12555-471 □-LF	470	±20%,30%	1	624	0.49
MGSL12555-681 □-LF	680	±20%,30%	1	912	0.43
MGSL12555-102 □-LF	1000	±20%,30%	1	1344	0.34

\*Rated Current: it is either the inductance is 10% lower than its nominal value in D.C. saturation characteristics or temperature raise becomes  $\Delta T=40^{\circ}\text{C}$ , whichever is lower.