



Ferrites and accessories

Toroids
R 2.5 to R 202

Series/Type: **B64290**
Date: June 2013

R 2.50 × 1.50 × 1.00
B64290P0035
R 2.50 × 1.50 × 1.30
B64290P0072

■ Parylene coating

R 2.50 × 1.50 × 1.00 (mm)
R 0.098 × 0.059 × 0.039 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
2.50 ±0.12	1.50 ±0.1	1.00 ±0.1	0.098 ±0.005	0.059 ±0.004	0.039 ±0.004	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	70 ±25%	700	B64290P0035X010	12.30	6.02	0.49	3.00	0.02
T57	410 ±25%	4000	B64290P0035X057					
N30	440 ±25%	4300	B64290P0035X830					
T65	470 ±30%	4600	B64290P0035X065					
T38	1020 ±30%	10000	B64290P0035X038					
T46	1530 ±30%	15000	B64290P0035X046					

■ Parylene coating

R 2.50 × 1.50 × 1.30 (mm)
R 0.098 × 0.059 × 0.051 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
2.50 ±0.12	1.50 ±0.1	1.30 ±0.12	0.098 ±0.005	0.059 ±0.004	0.051 ±0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	93 ±25%	700	B64290P0072X010	9.41	6.02	0.64	3.85	0.02
T57	530 ±25%	4000	B64290P0072X057					
T65	600 ±30%	4600	B64290P0072X065					
T38	1320 ±30%	10000	B64290P0072X038					
T46	2000 ±30%	15000	B64290P0072X046					

R 2.54 × 1.27 × 1.27
B64290P0734
R 3.05 × 1.27 × 1.27
B64290P0683

■ Parylene coating

R 2.54 × 1.27 × 1.27 (mm)
R 0.100 × 0.050 × 0.050 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
2.54 ±0.12	1.27 ±0.12	1.27 ±0.12	0.100 ±0.005	0.050 ±0.005	0.050 ±0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	120 ±25%	700	B64290P0734X010	7.18	5.53	0.77	4.29	0.03
T57	690 ±25%	3900	B64290P0734X057					
T65	800 ±30%	4500	B64290P0734X065					
T38	1760 ±30%	10000	B64290P0734X038					
T46	2640 ±30%	15000	B64290P0734X046					

■ Parylene coating

R 3.05 × 1.27 × 1.27 (mm)
R 0.120 × 0.050 × 0.050 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.05 ±0.12	1.27 ±0.12	1.27 ±0.12	0.120 ±0.005	0.050 ±0.005	0.050 ±0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	160 ±25%	700	B64290P0683X010	5.65	5.99	1.06	6.4	0.04
T57	830 ±25%	3700	B64290P0683X057					
T65	1000 ±30%	4500	B64290P0683X065					
T38	2200 ±30%	9900	B64290P0683X038					
T46	3340 ±30%	15000	B64290P0683X046					

R 3.05 × 1.27 × 2.54
B64290P0739
R 3.05 × 1.78 × 2.03
B64290P0733

■ Parylene coating

R 3.05 × 1.27 × 2.54 (mm)
R 0.120 × 0.050 × 0.100 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.05 ± 0.12	1.27 ± 0.12	2.54 ± 0.12	0.120 ± 0.005	0.050 ± 0.005	0.100 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$330 \pm 25\%$	700	B64290P0739X010	2.82	5.99	2.12	12.7	0.08
T57	$1700 \pm 25\%$	3800	B64290P0739X057					
T65	$2000 \pm 30\%$	4500	B64290P0739X065					
T38	$4200 \pm 30\%$	9400	B64290P0739X038					
T46	$6500 \pm 30\%$	15000	B64290P0739X046					

■ Parylene coating

R 3.05 × 1.78 × 2.03 (mm)
R 0.120 × 0.070 × 0.080 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.05 ± 0.12	1.78 ± 0.12	2.03 ± 0.12	0.120 ± 0.005	0.070 ± 0.005	0.080 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$160 \pm 25\%$	700	B64290P0733X010	5.75	7.23	1.26	9.10	0.06
T57	$870 \pm 25\%$	4000	B64290P0733X057					
T65	$1000 \pm 30\%$	4600	B64290P0733X065					
T38	$2150 \pm 30\%$	9900	B64290P0733X038					
T46	$3250 \pm 30\%$	15000	B64290P0733X046					

R 3.43 × 1.78 × 1.78
B64290P0731
R 3.43 × 1.78 × 2.03
B64290P0745

■ Parylene coating

R 3.43 × 1.78 × 1.78 (mm)
R 0.135 × 0.070 × 0.070 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.43 ± 0.12	1.78 ± 0.12	1.78 ± 0.12	0.135 ± 0.005	0.070 ± 0.005	0.070 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$160 \pm 25\%$	700	B64290P0731X010	5.38	7.63	1.42	10.7	0.06
T57	$930 \pm 25\%$	4000	B64290P0731X057					
T65	$1050 \pm 30\%$	4500	B64290P0731X065					
T38	$2300 \pm 30\%$	10000	B64290P0731X038					
T46	$3400 \pm 30\%$	15000	B64290P0731X046					

■ Parylene coating

R 3.43 × 1.78 × 2.03 (mm)
R 0.135 × 0.070 × 0.080 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.43 ± 0.12	1.78 ± 0.12	2.03 ± 0.12	0.135 ± 0.005	0.070 ± 0.005	0.080 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$190 \pm 25\%$	700	B64290P0745X010	4.72	7.63	1.62	12.2	0.07
T57	$1060 \pm 25\%$	4000	B64290P0745X057					
T65	$1200 \pm 30\%$	4500	B64290P0745X065					
T38	$2650 \pm 30\%$	10000	B64290P0745X038					
T46	$4000 \pm 30\%$	15000	B64290P0745X046					

R 3.43 × 1.78 × 2.11
B64290P0709
R 3.94 × 1.78 × 1.78
B64290P0732

■ Parylene coating

R 3.43 × 1.78 × 2.11 (mm)
R 0.135 × 0.070 × 0.083 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.43 ± 0.12	1.78 ± 0.12	2.11 ± 0.12	0.135 ± 0.005	0.070 ± 0.005	0.083 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$200 \pm 25\%$	700	B64290P0709X010	4.54	7.63	1.68	12.7	0.07
T57	$1100 \pm 25\%$	4000	B64290P0709X057					
T65	$1300 \pm 30\%$	4700	B64290P0709X065					
T38	$2770 \pm 30\%$	10000	B64290P0709X038					
T46	$4000 \pm 30\%$	15000	B64290P0709X046					

■ Parylene coating

R 3.94 × 1.78 × 1.78 (mm)
R 0.155 × 0.070 × 0.070 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.94 ± 0.12	1.78 ± 0.12	1.78 ± 0.12	0.155 ± 0.005	0.070 ± 0.005	0.070 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$200 \pm 25\%$	700	B64290P0732X010	4.44	8.10	1.82	14.8	0.08
T57	$1100 \pm 25\%$	3900	B64290P0732X057					
T65	$1350 \pm 30\%$	4800	B64290P0732X065					
T38	$2830 \pm 30\%$	10000	B64290P0732X038					
T46	$4200 \pm 30\%$	15000	B64290P0732X046					

R 3.94 × 2.24 × 1.30
B64290P0061
R 3.94 × 2.24 × 2.30
B64290P0723

■ Parylene coating

R 3.94 × 2.24 × 1.30 (mm)
R 0.155 × 0.088 × 0.051 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.94 ± 0.12	2.24 ± 0.12	1.30 ± 0.12	0.155 ± 0.005	0.088 ± 0.005	0.051 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$100 \pm 25\%$	700	B64290P0061X010	8.56	9.21	1.08	9.90	0.05
T57	$550 \pm 25\%$	3800	B64290P0061X057					
T65	$700 \pm 30\%$	4800	B64290P0061X065					
T38	$1470 \pm 30\%$	10000	B64290P0061X038					
T46	$2200 \pm 30\%$	15000	B64290P0061X046					

■ Parylene coating

R 3.94 × 2.24 × 2.30 (mm)
R 0.155 × 0.088 × 0.090 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
3.94 ± 0.12	2.24 ± 0.12	2.30 ± 0.15	0.155 ± 0.005	0.088 ± 0.005	0.090 ± 0.006	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$180 \pm 25\%$	700	B64290P0723X010	4.85	9.21	1.90	17.5	0.09
T57	$990 \pm 25\%$	3800	B64290P0723X057					
T65	$1200 \pm 30\%$	4800	B64290P0723X065					
T38	$2600 \pm 30\%$	10000	B64290P0723X038					
T46	$3890 \pm 30\%$	15000	B64290P0723X046					

R 4.00 × 2.40 × 1.60
B64290P0036
R 4.00 × 2.40 × 1.80
B64290P0692

■ Parylene coating

R 4.00 × 2.40 × 1.60 (mm)
R 0.157 × 0.094 × 0.063 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
4.00 ±0.12	2.40 ±0.12	1.60 ±0.1	0.157 ±0.005	0.094 ±0.004	0.063 ±0.004	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N30	700 ±25%	4300	B64290P0036X830	7.7	9.63	1.25	12.0	0.05
T65	750 ±30%	4600	B64290P0036X065					
T38	1630 ±30%	10000	B64290P0036X038					
T46	2450 ±30%	15000	B64290P0036X046					

■ Parylene coating

R 4.00 × 2.40 × 1.80 (mm)
R 0.157 × 0.094 × 0.071 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
4.00 ±0.12	2.40 ±0.12	1.80 ±0.12	0.157 ±0.005	0.094 ±0.004	0.071 ±0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N30	790 ±25%	4300	B64290P0692X830	6.83	9.63	1.41	13.6	0.07
T65	840 ±30%	4600	B64290P0692X065					
T38	1840 ±30%	10000	B64290P0692X038					
T46	2760 ±30%	15000	B64290P0692X046					

R 5.84 × 3.05 × 1.52
B64290P0056
R 5.84 × 3.05 × 3.00
B64290P0687

■ Parylene coating

R 5.84 × 3.05 × 1.52 (mm)
R 0.230 × 0.120 × 0.060 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
5.84 ± 0.12	3.05 ± 0.12	1.52 ± 0.12	0.230 ± 0.005	0.120 ± 0.005	0.060 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N30	$850 \pm 25\%$	4300	B64290P0056X830	6.36	13.03	2.05	26.7	0.15
T65	$1020 \pm 30\%$	4600	B64290P0056X065					
T38	$1900 \pm 30\%$	10000	B64290P0056X038					
T46	$2900 \pm 30\%$	15000	B64290P0056X046					

■ Parylene coating

R 5.84 × 3.05 × 3.00 (mm)
R 0.230 × 0.120 × 0.118 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
5.84 ± 0.12	3.05 ± 0.12	3.00 ± 0.15	0.230 ± 0.005	0.120 ± 0.005	0.118 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N30	$1680 \pm 25\%$	4300	B64290P0687X830	3.22	13.03	4.04	52.6	0.3
T65	$1800 \pm 30\%$	4600	B64290P0687X065					
T38	$3900 \pm 30\%$	10000	B64290P0687X038					
T46	$5850 \pm 30\%$	15000	B64290P0687X046					

R 6.30 × 3.80 × 2.50
B64290P0037
R 8.00 × 4.00 × 4.00
B64290P0751

■ Parylene coating

R 6.30 × 3.80 × 2.50 (mm)
R 0.248 × 0.150 × 0.098 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
6.30 ± 0.15	3.80 ± 0.12	2.50 ± 0.12	0.248 ± 0.006	0.150 ± 0.005	0.098 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K1	$20 \pm 25\%$	80	B64290P0037X001	4.97	15.21	3.06	46.5	0.2
N87	$560 \pm 25\%$	2200	B64290P0037X087					
N30	$1090 \pm 25\%$	4300	B64290P0037X830					
T65	$1160 \pm 30\%$	4600	B64290P0037X065					
T38	$2530 \pm 30\%$	10000	B64290P0037X038					
T46	$3600 \pm 30\%$	14000	B64290P0037X046					

■ Parylene coating

R 8.00 × 4.00 × 4.00 (mm)
R 0.315 × 0.158 × 0.158 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
8.00 ± 0.18	4.00 ± 0.12	4.00 ± 0.12	0.315 ± 0.007	0.158 ± 0.005	0.158 ± 0.005	uncoated ¹⁾
Coating thickness 0.017 mm						coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N87	$1200 \pm 25\%$	2200	B64290P0751X087	2.26	17.42	7.70	134	0.7
N30	$2400 \pm 25\%$	4300	B64290P0751X830					
T65	$2550 \pm 30\%$	4600	B64290P0751X065					
T38	$5500 \pm 30\%$	10000	B64290P0751X038					
T46	$8000 \pm 30\%$	15000	B64290P0751X046					

R 9.53 × 4.75 × 3.17
B64290L0062
R 10.0 × 6.00 × 4.00
B64290L0038

■ Epoxy coating

R 9.53 × 4.75 × 3.17 (mm)
R 0.375 × 0.187 × 0.125 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
9.53 ±0.19	4.75 ±0.12	3.17 ±0.15	0.375 ±0.007	0.187 ±0.005	0.125 ±0.006	uncoated ¹⁾
10.5 max.	3.8 min.	4.1 max.	0.413 max.	0.130 min.	0.161 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	970 ±25%	2200	B64290L0062X087	2.85	20.72	7.28	151	0.8
N30	1900 ±25%	4300	B64290L0062X830					
T65	2050 ±30%	4600	B64290L0062X065					
T35	2650 ±25%	6000	B64290L0062X035					
T38	4410 ±30%	10000	B64290L0062X038					
T46	6400 ±30%	15000	B64290L0062X046					

■ Epoxy coating

R 10.0 × 6.00 × 4.00 (mm)
R 0.394 × 0.236 × 0.157 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
10.0 ±0.2	6.0 ±0.15	4.00 ±0.15	0.394 ±0.008	0.236 ±0.006	0.157 ±0.006	uncoated ¹⁾
10.8 max.	5.25 min.	4.75 max.	0.433 max.	0.199 min.	0.195 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N49	610 ±25%	1500	B64290L0038X049	3.07	24.07	7.83	188	0.9
N87	900 ±25%	2200	B64290L0038X087					
N30	1760 ±25%	4300	B64290L0038X830					
T65	1900 ±30%	4700	B64290L0038X065					
T35	2460 ±25%	6000	B64290L0038X035					
T37	2660 ±25%	6500	B64290L0038X037					
T38	4090 ±30%	10000	B64290L0038X038					
T46	6000 ±30%	15000	B64290L0038X046					

R 10.0 × 6.00 × 7.00
B64290L0783
R 12.5 × 7.50 × 5.00
B64290L0044

■ Epoxy coating

R 10.0 × 6.00 × 7.00 (mm)
R 0.394 × 0.236 × 0.318 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
10.0 ±0.2	6.0 ±0.15	7.00 ±0.15	0.394 ±0.008	0.236 ±0.006	0.275 ±0.006	uncoated ¹⁾
10.8 max.	5.25 min.	7.75 max.	0.433 max.	0.199 min.	0.318 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	450 ±25%	630	B64290L0783X010	1.76	24.07	13.7	330	1.7
N30	3070 ±25%	4300	B64290L0783X830					
T65	3360 ±30%	4700	B64290L0783X065					
T38	7150 ±30%	10000	B64290L0783X038					
T46	10700 ±30%	15000	B64290L0783X046					

■ Epoxy coating

R 12.5 × 7.50 × 5.00 (mm)
R 0.492 × 0.295 × 0.197 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
12.5 ±0.3	7.5 ±0.2	5.00 ±0.15	0.492 ±0.012	0.295 ±0.008	0.197 ±0.005	uncoated ¹⁾
13.6 max.	6.5 min.	5.95 max.	0.535 max.	0.256 min.	0.234 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N49	660 ±25%	1300	B64290L0044X049	2.46	30.09	12.23	368	1.8
N87	1120 ±25%	2200	B64290L0044X087					
N30	2200 ±25%	4300	B64290L0044X830					
T65	2400 ±30%	4700	B64290L0044X065					
T35	3060 ±25%	6000	B64290L0044X035					
T37	3320 ±25%	6500	B64290L0044X037					
T38	5110 ±30%	10000	B64290L0044X038					

R 12.7 × 7.90 × 6.35
B64290L0742
R 13.3 × 8.30 × 5.00
B64290L0644

■ Epoxy coating

R 12.7 × 7.90 × 6.35 (mm)
R 0.500 × 0.311 × 0.250 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
12.7 ±0.3	7.9 ±0.25	6.35 ±0.2	0.500 ±0.012	0.311 ±0.010	0.250 ±0.008	uncoated ¹⁾
13.6 max.	7.10 min.	7.15 max.	0.535 max.	0.281 min.	0.281 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	1330 ±25%	2200	B64290L0742X087	2.08	31.17	14.96	466	2.4
N30	2600 ±25%	4300	B64290L0742X830					
T65	2850 ±30%	4700	B64290L0742X065					
T35	3620 ±25%	6000	B64290L0742X035					
T37	3920 ±25%	6500	B64290L0742X037					
T38	6030 ±30%	10000	B64290L0742X038					

■ Epoxy coating

R 13.3 × 8.30 × 5.00 (mm)
R 0.524 × 0.327 × 0.197 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
13.3 ±0.3	8.3 ±0.3	5.00 ±0.15	0.524 ±0.012	0.327 ±0.012	0.197 ±0.005	uncoated ¹⁾
14.4 max.	7.2 min.	5.95 max.	0.567 max.	0.283 min.	0.234 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	1040 ±25%	2200	B64290L0644X087	2.67	32.70	12.27	401	1.8
N30	2030 ±25%	4300	B64290L0644X830					
T65	2300 ±30%	4900	B64290L0644X065					
T35	2830 ±25%	6000	B64290L0644X035					
T37	3060 ±25%	6500	B64290L0644X037					
T38	4700 ±30%	10000	B64290L0644X038					

R 14.0 × 9.00 × 5.00
B64290L0658
R 15.0 × 10.4 × 5.30
B64290L0623

■ Epoxy coating

R 14.0 × 9.00 × 5.00 (mm)
R 0.551 × 0.354 × 0.197 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
14.0 ±0.3	9.0 ±0.25	5.00 ±0.2	0.551 ±0.012	0.354 ±0.012	0.197 ±0.008	uncoated ¹⁾
15.1 max.	7.95 min.	6.0 max.	0.594 max.	0.313 min.	0.236 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	970 ±25%	2200	B64290L0658X087	2.84	34.98	12.30	430	2.0
N30	1900 ±25%	4300	B64290L0658X830					
T65	2300 ±30%	5200	B64290L0658X065					
T35	2650 ±25%	6000	B64290L0658X035					
T37	2880 ±25%	6500	B64290L0658X037					
T38	4420 ±30%	10000	B64290L0658X038					

■ Epoxy coating

R 15.0 × 10.4 × 5.30 (mm)
R 0.591 × 0.409 × 0.209 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
15.0 ±0.5	10.4 ±0.4	5.30 ±0.3	0.591 ±0.020	0.409 ±0.016	0.209 ±0.012	uncoated ¹⁾
16.3 max.	9.2 min.	6.4 max.	0.642 max.	0.362 min.	0.252 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	850 ±25%	2200	B64290L0623X087	3.24	39.02	12.05	470	2.4
N30	1670 ±25%	4300	B64290L0623X830					
T65	2020 ±30%	5200	B64290L0623X065					
T35	2330 ±25%	6000	B64290L0623X035					
T37	2520 ±25%	6500	B64290L0623X037					
T38	3880 ±30%	10000	B64290L0623X038					

R 15.8 × 8.90 × 4.70
B64290L0743
R 16.0 × 9.60 × 6.30
B64290L0045

■ Epoxy coating

R 15.8 × 8.90 × 4.70 (mm)
R 0.622 × 0.350 × 0.185 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
15.8 ±0.38	8.9 ±0.25	4.70 ±0.13	0.622 ±0.015	0.350 ±0.010	0.185 ±0.005	uncoated ¹⁾
16.8 max.	8.05 min.	5.45 max.	0.661 max.	0.317 min.	0.215 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	1190 ±25%	2200	B64290L0743X087	2.33	36.75	15.78	580	3.0
N30	2320 ±25%	4300	B64290L0743X830					
T65	2800 ±30%	5200	B64290L0743X065					
T35	3240 ±25%	6000	B64290L0743X035					
T37	3500 ±25%	6500	B64290L0743X037					
T38	5400 ±30%	10000	B64290L0743X038					

■ Epoxy coating

R 16.0 × 9.60 × 6.30 (mm)
R 0.630 × 0.378 × 0.248 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
16.0 ±0.4	9.6 ±0.3	6.30 ±0.2	0.630 ±0.016	0.378 ±0.012	0.248 ±0.008	uncoated ¹⁾
17.2 max.	8.5 min.	7.3 max.	0.677 max.	0.335 min.	0.287 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	1420 ±25%	2200	B64290L0045X087	1.95	38.52	19.73	760	3.7
N30	2770 ±25%	4300	B64290L0045X830					
T65	3350 ±30%	5200	B64290L0045X065					
T35	3870 ±25%	6000	B64290L0045X035					
T37	4190 ±25%	6500	B64290L0045X037					
T38	6440 ±30%	10000	B64290L0045X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 0.45 W/core

R 17.0 × 10.7 × 6.80
B64290L0652
R 18.4 × 5.90 × 5.90
B64290L0697

■ Epoxy coating

R 17.0 × 10.7 × 6.80 (mm)
R 0.669 × 0.421 × 0.268 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
17.0 ±0.4	10.7 ±0.3	6.80 ±0.2	0.669 ±0.016	0.421 ±0.012	0.268 ±0.008	uncoated ¹⁾
18.2 max.	9.6 min.	7.8 max.	0.717 max.	0.378 min.	0.307 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	1390 ±25%	2200	B64290L0652X087	2.00	42.00	21.04	884	4.4
N30	2710 ±25%	4300	B64290L0652X830					
T65	3250 ±30%	5200	B64290L0652X065					
T35	3770 ±25%	6000	B64290L0652X035					
T37	4080 ±25%	6500	B64290L0652X037					
T38	6280 ±30%	10000	B64290L0652X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 0.55 W/core

■ Epoxy coating

R 18.4 × 5.90 × 5.90 (mm)
R 0.724 × 0.232 × 0.232 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
18.4 ±0.4	5.9 ±0.3	5.90 ±0.2	0.724 ±0.016	0.232 ±0.012	0.232 ±0.008	uncoated ¹⁾
19.5 max.	4.8 min.	6.7 max.	0.768 max.	0.189 min.	0.264 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	2950 ±25%	2200	B64290L0697X087	0.94	31.03	33.14	1029	6.9
N30	5770 ±25%	4300	B64290L0697X830					
T65	6680 ±30%	5000	B64290L0697X065					
T35	8020 ±25%	6000	B64290L0697X035					
T37	8690 ±25%	6500	B64290L0697X037					
T38	13400 ±30%	10000	B64290L0697X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 0.82 W/core

R 20.0 × 10.0 × 7.00
B64290L0632
R 22.1 × 13.7 × 6.35
B64290L0638

■ Epoxy coating

R 20.0 × 10.0 × 7.00 (mm)
R 0.787 × 0.394 × 0.276 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
20.0 ±0.4	10.0 ±0.25	7.00 ±0.3	0.787 ±0.016	0.394 ±0.010	0.276 ±0.012	uncoated ¹⁾
21.2 max.	8.95 min.	8.1 max.	0.835 max.	0.352 min.	0.319 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	2130 ±25%	2200	B64290L0632X087	1.30	43.55	33.63	1465	7.6
N30	4160 ±25%	4300	B64290L0632X830					
T35	5000 ±25%	5100	B64290L0632X035					
T65	5050 ±30%	5200	B64290L0632X065					
T37	6280 ±25%	6500	B64290L0632X037					
T38	9740 ±30%	10000	B64290L0632X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 0.95 W/core

■ Epoxy coating

R 22.1 × 13.7 × 6.35 (mm)
R 0.870 × 0.539 × 0.250 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
22.1 ±0.4	13.7 ±0.3	6.35 ±0.3	0.870 ±0.016	0.539 ±0.012	0.250 ±0.012	uncoated ¹⁾
23.3 max.	12.6 min.	7.4 max.	0.917 max.	0.496 min.	0.291 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	1340 ±25%	2200	B64290L0638X087	2.07	54.15	26.17	1417	6.8
N30	2610 ±25%	4300	B64290L0638X830					
T65	3160 ±30%	5200	B64290L0638X065					
T35	3200 ±25%	5300	B64290L0638X035					
T37	3950 ±25%	6500	B64290L0638X037					
T38	6070 ±30%	10000	B64290L0638X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 0.85 W/core

R 22.1 × 13.7 × 7.90
B64290L0719
R 22.1 × 13.7 × 12.5
B64290L0651

■ Epoxy coating

R 22.1 × 13.7 × 7.90 (mm)
R 0.870 × 0.539 × 0.311 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
22.1 ±0.4	13.7 ±0.3	7.90 ±0.3	0.870 ±0.016	0.539 ±0.012	0.311 ±0.012	uncoated ¹⁾
23.3 max.	12.6 min.	9.0 max.	0.917 max.	0.496 min.	0.354 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N49	1130 ±25%	1500	B64290L0719X049	1.66	54.2	32.6	1763	8.4
N87	1660 ±25%	2200	B64290L0719X087					
N30	3250 ±25%	4300	B64290L0719X830					
T65	3930 ±30%	5200	B64290L0719X065					
T35	4000 ±25%	5300	B64290L0719X035					
T37	4900 ±25%	6500	B64290L0719X037					
T38	7570 ±30%	10000	B64290L0719X038					

 N49: P_V (50 mT, 500 kHz, 100 °C) < 0.30 W/core

 N87: P_V (200 mT, 100 kHz, 100 °C) < 1.05 W/core

■ Epoxy coating

R 22.1 × 13.7 × 12.5 (mm)
R 0.870 × 0.539 × 0.492 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
22.1 ±0.4	13.7 ±0.3	12.5 ±0.5	0.870 ±0.016	0.539 ±0.012	0.492 ±0.020	uncoated ¹⁾
23.3 max.	12.6 min.	13.8 max.	0.917 max.	0.496 min.	0.543 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	2630 ±25%	2200	B64290L0651X087	1.05	54.15	51.15	2789	14
N30	5140 ±25%	4300	B64290L0651X830					
T35	6000 ±25%	5000	B64290L0651X035					
T65	6200 ±30%	5200	B64290L0651X065					
T37	7770 ±25%	6500	B64290L0651X037					
T38	12000 ±30%	10000	B64290L0651X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 1.75 W/core

R 22.6 × 14.7 × 9.20
B64290L0626
R 25.3 × 14.8 × 10.0
B64290L0618

■ Epoxy coating

R 22.6 × 14.7 × 9.20 (mm)
R 0.890 × 0.579 × 0.362 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
22.6 ±0.4	14.7 ±0.2	9.20 ±0.2	0.890 ±0.016	0.579 ±0.008	0.362 ±0.008	uncoated ¹⁾
23.8 max.	13.7 min.	10.2 max.	0.937 max.	0.539 min.	0.402 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	1740 ±25%	2200	B64290L0626X087	1.59	56.82	35.78	2033	9.8
N30	3420 ±25%	4300	B64290L0626X830					
T65	4100 ±30%	5200	B64290L0626X065					
T35	4200 ±25%	5300	B64290L0626X035					
T37	5170 ±25%	6500	B64290L0626X037					
T38	7900 ±30%	10000	B64290L0626X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 1.25 W/core

■ Epoxy coating

R 25.3 × 14.8 × 10.0 (mm)
R 0.996 × 0.583 × 0.394 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
25.3 ±0.5	14.8 ±0.5	10.0 ±0.2	0.996 ±0.020	0.583 ±0.020	0.394 ±0.008	uncoated ¹⁾
26.6 max.	13.5 min.	11.0 max.	1.047 max.	0.531 min.	0.433 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	2360 ±25%	2200	B64290L0618X087	1.17	60.07	51.26	3079	16
N30	4620 ±25%	4300	B64290L0618X830					
T65	5350 ±30%	5000	B64290L0618X065					
T35	5400 ±25%	5000	B64290L0618X035					
T37	6970 ±25%	6500	B64290L0618X037					
T38	10700 ±30%	10000	B64290L0618X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 2 W/core

R 25.3 × 14.8 × 15.0
B64290L0615
R 25.3 × 14.8 × 20.0
B64290L0616

■ Epoxy coating

R 25.3 × 14.8 × 15.0 (mm)
R 0.996 × 0.583 × 0.590 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
25.3 ±0.5	14.8 ±0.5	15.0 ±0.4	0.996 ±0.020	0.583 ±0.020	0.590 ±0.016	uncoated ¹⁾
26.6 max.	13.5 min.	16.2 max.	1.047 max.	0.531 min.	0.638 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	3500 ±25%	2200	B64290L0615X087	0.78	60.07	76.89	4619	24
N30	6930 ±25%	4300	B64290L0615X830					
T65	8000 ±30%	5000	B64290L0615X065					
T37	10460 ±25%	6500	B64290L0615X037					
T38	16100 ±30%	10000	B64290L0615X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 3 W/core

■ Epoxy coating

R 25.3 × 14.8 × 20.0 (mm)
R 0.996 × 0.583 × 0.787 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
25.3 ±0.5	14.8 ±0.5	20.0 ±0.5	0.996 ±0.020	0.583 ±0.020	0.787 ±0.020	uncoated ¹⁾
26.6 max.	13.5 min.	21.3 max.	1.047 max.	0.531 min.	0.839 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	4680 ±25%	2200	B64290L0616X087	0.59	60.07	102.5	6157	33
N30	9160 ±25%	4300	B64290L0616X830					
T65	10600 ±30%	5000	B64290L0616X065					
T35	10700 ±25%	5000	B64290L0616X035					
T37	13800 ±25%	6400	B64290L0616X037					
T38	21300 ±30%	10000	B64290L0616X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 4.1 W/core

R 29.5 × 19.0 × 14.9
B64290L0647
R 30.5 × 20.0 × 12.5
B64290L0657

■ Epoxy coating

R 29.5 × 19.0 × 14.9 (mm)
R 1.142 × 0.748 × 0.587 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
29.5 ±0.7	19.0 ±0.5	14.9 ±0.4	1.142 ±0.028	0.748 ±0.020	0.587 ±0.016	uncoated ¹⁾
31.0 max.	17.7 min.	16.1 max.	1.220 max.	0.697 min.	0.634 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	2880 ±25%	2200	B64290L0647X087	0.96	73.78	76.98	5680	27
N30	5630 ±25%	4300	B64290L0647X830					
T65	6800 ±30%	5200	B64290L0647X065					
T37	8500 ±25%	6500	B64290L0647X037					
T38	13100 ±30%	10000	B64290L0647X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 2.95 W/core

■ Epoxy coating

R 30.5 × 20.0 × 12.5 (mm)
R 1.201 × 0.787 × 0.492 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
30.5 ±1.0	20.0 ±0.6	12.5 ±0.4	1.201 ±0.039	0.787 ±0.024	0.492 ±0.016	uncoated ¹⁾
32.1 max.	18.8 min.	13.5 max.	1.264 max.	0.694 min.	0.531 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	2320 ±25%	2200	B64290L0657X087	1.19	77.02	64.66	4980	25
N30	4540 ±25%	4300	B64290L0657X830					
T65	5400 ±30%	5100	B64290L0657X065					
T37	6400 ±25%	6100	B64290L0657X037					
T38	10600 ±30%	10000	B64290L0657X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 2.65 W/core

R 34.0 × 20.5 × 10.0
B64290L0058
R 34.0 × 20.5 × 12.5
B64290L0048

■ Epoxy coating

R 34.0 × 20.5 × 10.0 (mm)
R 1.339 × 0.807 × 0.394 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
34.0 ± 0.7	20.5 ± 0.5	10.0 ± 0.3	1.339 ± 0.028	0.807 ± 0.020	0.394 ± 0.012	uncoated ¹⁾
35.5 max.	19.2 min.	11.1 max.	1.398 max.	0.756 min.	0.437 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N87	$2230 \pm 25\%$	2200	B64290L0058X087	1.24	82.06	66.08	5423	27
N30	$4360 \pm 25\%$	4300	B64290L0058X830					
T65	$5100 \pm 30\%$	5000	B64290L0058X065					
T37	$6100 \pm 25\%$	6000	B64290L0058X037					
T38	$10100 \pm 30\%$	10000	B64290L0058X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 3.4 W/core

■ Epoxy coating

R 34.0 × 20.5 × 12.5 (mm)
R 1.339 × 0.807 × 0.492 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
34.0 ± 0.7	20.5 ± 0.5	12.5 ± 0.3	1.339 ± 0.028	0.807 ± 0.020	0.492 ± 0.012	uncoated ¹⁾
35.5 max.	19.2 min.	13.6 max.	1.398 max.	0.756 min.	0.535 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N87	$2790 \pm 25\%$	2200	B64290L0048X087	0.99	82.06	82.60	6778	33
N30	$5460 \pm 25\%$	4300	B64290L0048X830					
T65	$6400 \pm 30\%$	5000	B64290L0048X065					
T37	$7600 \pm 25\%$	6000	B64290L0048X037					
T38	$12700 \pm 30\%$	10000	B64290L0048X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 4.2 W/core

R 36.0 × 23.0 × 15.0
B64290L0674
R 38.1 × 19.05 × 12.7
B64290L0668

■ Epoxy coating

R 36.0 × 23.0 × 15.0 (mm)
R 1.417 × 0.906 × 0.591 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
36.0 ± 0.7	23.0 ± 0.5	15.0 ± 0.4	1.417 ± 0.028	0.906 ± 0.020	0.591 ± 0.016	uncoated ¹⁾
37.5 max.	21.7 min.	16.2 max.	1.476 max.	0.854 min.	0.638 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N87	$2940 \pm 25\%$	2200	B64290L0674X087	0.94	89.65	95.89	8597	43
N30	$5750 \pm 25\%$	4300	B64290L0674X830					
T65	$6800 \pm 30\%$	5000	B64290L0674X065					
T37	$8000 \pm 25\%$	6000	B64290L0674X037					
T38	$13500 \pm 30\%$	10000	B64290L0674X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 5.4 W/core

■ Epoxy coating

R 38.1 × 19.05 × 12.7 (mm)
R 1.500 × 0.750 × 0.500 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
38.1 ± 0.5	19.05 ± 0.4	12.7 ± 0.3	1.500 ± 0.020	0.750 ± 0.016	0.500 ± 0.012	uncoated ¹⁾
39.4 max.	17.85 min.	13.8 max.	1.551 max.	0.703 min.	0.543 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
N87	$3870 \pm 25\%$	2200	B64290L0668X087	0.71	82.97	116.2	9644	52
N30	$7570 \pm 25\%$	4300	B64290L0668X830					
T65	$8800 \pm 30\%$	5000	B64290L0668X065					
T37	$10500 \pm 25\%$	6000	B64290L0668X037					
T38	$17600 \pm 30\%$	10000	B64290L0668X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 6.5 W/core

R 40.0 × 24.0 × 16.0
B64290L0659
R 41.8 × 26.2 × 12.5
B64290L0022

■ Epoxy coating

R 40.0 × 24.0 × 16.0 (mm)
R 1.575 × 0.945 × 0.630 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
40.0 ±1.0	24.0 ±0.7	16.0 ±0.4	1.575 ±0.039	0.945 ±0.028	0.630 ±0.016	uncoated ¹⁾
41.8 max.	22.5 min.	17.2 max.	1.646 max.	0.886 min.	0.677 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	3590 ±25%	2200	B64290L0659X087	0.77	96.29	125.3	12070	61
N30	7000 ±25%	4300	B64290L0659X830					
T65	8200 ±30%	5000	B64290L0659X065					
T35	8200 ±25%	5000	B64290L0659X035					
T37	9800 ±25%	6000	B64290L0659X037					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 7.6 W/core

■ Epoxy coating

R 41.8 × 26.2 × 12.5 (mm)
R 1.646 × 1.031 × 0.492 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
41.8 ±1.0	26.2 ±0.6	12.5 ±0.3	1.646 ±0.039	1.031 ±0.024	0.492 ±0.012	uncoated ¹⁾
43.6 max.	24.8 min.	13.6 max.	1.717 max.	0.976 min.	0.535 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
N87	2560 ±25%	2200	B64290L0022X087	1.08	103.0	95.75	9862	50
N30	5000 ±25%	4300	B64290L0022X830					
T65	5800 ±30%	5000	B64290L0022X065					
T37	7000 ±25%	6000	B64290L0022X037					
T38	11600 ±30%	10000	B64290L0022X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 6 W/core

R 50.0 × 30.0 × 20.0
B64290L0082
R 58.3 × 32.0 × 18.0
B64290L0043

■ Epoxy coating

R 50.0 × 30.0 × 20.0 (mm)
R 1.969 × 1.181 × 0.787 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
50.0 ±1.0	30.0 ±0.7	20.0 ±0.5	1.969 ±0.039	1.181 ±0.028	0.787 ±0.020	uncoated ¹⁾
51.8 max.	28.5 min.	21.3 max.	2.039 max.	1.122 min.	0.839 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	1400 ±25%	700	B64290A0082X010	0.62	120.4	195.7	23560	120
N87	4460 ±25%	2200	B64290L0082X087					
N30	8700 ±25%	4300	B64290L0082X830					
T65	10000 ±30%	4900	B64290L0082X065					
T37	12000 ±25%	6000	B64290L0082X037					
T38	17400 ±30%	8500	B64290L0082X038					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 14.2 W/core

■ Epoxy coating

R 58.3 × 32.0 × 18.0 (mm)
R 2.295 × 1.260 × 0.709 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
58.3 ±1.0	32.0 ±0.7	18.0 ±0.5	2.295 ±0.039	1.260 ±0.028	0.709 ±0.020	uncoated ¹⁾
60.1 max.	30.5 min.	19.3 max.	2.366 max.	1.201 min.	0.760 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	1500 ±25%	700	B64290A0043X010	0.58	134.0	230.0	30710	160
N87	4800 ±25%	2200	B64290L0043X087					
N30	9300 ±25%	4300	B64290L0043X830					
T37	13000 ±25%	6000	B64290L0043X037					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 19 W/core

R 58.3 × 40.8 × 17.6
B64290L0040
R 58.3 × 40.8 × 20.2
B64290L0042

■ Epoxy coating

R 58.3 × 40.8 × 17.6 (mm)
R 2.295 × 1.606 × 0.693 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
58.3 ± 1.0	40.8 ± 0.8	17.6 ± 0.4	2.295 ± 0.039	1.606 ± 0.031	0.693 ± 0.016	uncoated ¹⁾
60.1 max.	39.2 min.	18.8 max.	2.366 max.	1.543 min.	0.740 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$900 \pm 25\%$	700	B64290A0040X010	1.00	152.4	152.4	23230	115
N87	$2760 \pm 25\%$	2200	B64290L0040X087					
N30	$5400 \pm 25\%$	4300	B64290L0040X830					
T65	$6250 \pm 30\%$	5000	B64290L0040X065					
T37	$7160 \pm 25\%$	5700	B64290L0040X037					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 14.5 W/core

■ Epoxy coating

R 58.3 × 40.8 × 20.2 (mm)
R 2.295 × 1.606 × 0.795 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
58.3 ± 1.0	40.8 ± 0.8	20.2 ± 0.5	2.295 ± 0.039	1.606 ± 0.031	0.795 ± 0.020	uncoated ¹⁾
60.1 max.	39.2 min.	21.5 max.	2.366 max.	1.543 min.	0.846 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$1000 \pm 25\%$	700	B64290A0042X010	0.87	152.4	174.9	26660	130
N87	$3200 \pm 25\%$	2200	B64290L0042X087					
N30	$6200 \pm 25\%$	4300	B64290L0042X830					
T65	$7200 \pm 30\%$	5000	B64290L0042X065					
T37	$8000 \pm 25\%$	5600	B64290L0042X037					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 16.6 W/core

R 63.0 × 38.0 × 25.0
B64290L0699
R 68.0 × 48.0 × 13.0
B64290L0696

■ Epoxy coating

R 63.0 × 38.0 × 25.0 (mm)
R 2.480 × 1.496 × 0.984 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
63.0 ± 1.5	38.0 ± 1.2	25.0 ± 0.8	2.480 ± 0.059	1.496 ± 0.047	0.984 ± 0.031	uncoated ¹⁾
65.3 max.	36.0 min.	26.6 max.	2.571 max.	1.417 min.	1.047 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$1800 \pm 25\%$	700	B64290A0699X010	0.50	152.1	305.9	46530	240
N87	$5000 \pm 25\%$	2200	B64290L0699X087					
N30	$10800 \pm 25\%$	4300	B64290L0699X830					
T65	$12600 \pm 30\%$	5000	B64290L0699X065					
T37	$13900 \pm 25\%$	5500	B64290L0699X037					

 N87: P_V (100 mT, 100 kHz, 100 °C) < 5.2 W/core

■ Epoxy coating

R 68.0 × 48.0 × 13.0 (mm)
R 2.677 × 1.890 × 0.512 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
68.0 ± 1.2	48.0 ± 1.0	13.0 ± 0.4	2.677 ± 0.047	1.890 ± 0.039	0.512 ± 0.015	uncoated ¹⁾
70.0 max.	46.2 min.	14.2 max.	2.756 max.	1.819 min.	0.559 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm^{-1}	l_e mm	A_e mm^2	V_e mm^3	
K10	$600 \pm 25\%$	700	B64290A0696X010	1.39	178.6	128.7	22980	115
N87	$1990 \pm 25\%$	2200	B64290L0696X087					
N30	$3890 \pm 25\%$	4300	B64290L0696X830					
T65	$4500 \pm 30\%$	5000	B64290L0696X065					
T37	$5000 \pm 25\%$	5500	B64290L0696X037					

 N87: P_V (200 mT, 100 kHz, 100 °C) < 13 W/core

R 87.0 × 54.3 × 13.5
B64290L0730
R 102 × 65.8 × 15.0
B64290L0084

■ Epoxy coating

R 87.0 × 54.3 × 13.5 (mm)
R 3.425 × 2.138 × 0.531 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
87.0 ±1.5	54.3 ±1.1	13.5 ±0.3	3.425 ±0.059	2.138 ±0.043	0.531 ±0.012	uncoated ¹⁾
89.3 max.	52.4 min.	14.8 max.	3.516 max.	2.063 min.	0.583 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	900 ±25%	700	B64290A0730X010	0.99	213.9	216.7	46360	235
N87	2790 ±25%	2200	B64290L0730X087					
N30	5400 ±25%	4300	B64290L0730X830					
T65	6280 ±30%	5000	B64290L0730X065					
T37	7000 ±25%	5500	B64290L0730X037					

 N87: P_V (100 mT, 100 kHz, 100 °C) < 5 W/core

■ Epoxy coating

R 102 × 65.8 × 15.0 (mm)
R 4.016 × 2.591 × 0.591 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
102.0 ±2.0	65.8 ±1.3	15.0 ±0.5	4.016 ±0.079	2.591 ±0.051	0.591 ±0.020	uncoated ¹⁾
104.8 max.	63.7 min.	16.5 max.	4.126 max.	2.508 min.	0.650 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	900 ±25%	700	B64290A0084X010	0.96	255.3	267.2	68220	330
N87	2880 ±25%	2200	B64290L0084X087					
N30	5500 ±25%	4200	B64290L0084X830					
T65	6500 ±30%	5000	B64290L0084X065					

 N87: P_V (100 mT, 100 kHz, 100 °C) < 7.8 W/core

R 140 × 103 × 25.0
B64290A0705
R 202 × 153 × 25.0
B64290A0711

■ Without coating

R 140 × 103 × 25.0 (mm)
R 5.512 × 4.055 × 0.984 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
140.0 ±3.0	103 ±2.0	25.0 ±1.0	5.512 ±0.118	4.055 ±0.079	0.984 ±0.039	uncoated
143.8 max.	100.2 min.	27.2 max.	5.661 max.	3.945 min.	1.071 max.	coated

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	1100 ±25%	700	B64290A0705X010	0.82	375.8	458.9	172440	860
N87	3400 ±25%	2200	B64290L0705X087					
N30	6200 ±25%	4000	B64290L0705X830					
T37	8400 ±25%	5500	B64290L0705X037					

 N87: P_V (100 mT, 100 kHz, 100 °C) < 20 W/core

■ Without coating

R 202.0 × 153 × 25.0 (mm)
R 7.953 × 6.024 × 0.984 (inch)
Dimensions

d_a (mm)	d_i (mm)	Height (mm)	d_a (inch)	d_i (inch)	Height (inch)	
202.0 ±4.0	153.0 ±3.0	25.0 ±1.0	7.953 ±0.157	6.024 ±0.118	0.984 ±0.039	uncoated
207.0 max.	149.0 min.	27.5 max.	8.150 max.	5.866 min.	1.083 max.	coated ¹⁾

Characteristics and ordering codes

Material	A_L value nH	μ_i (approx.)	Ordering code	Magnetic characteristics				Approx. weight g
				$\Sigma I/A$ mm ⁻¹	l_e mm	A_e mm ²	V_e mm ³	
K10	970 ±25%	700	B64290A0711X010	0.90	550.5	608.6	335030	1600
N30	5200 ±25%	3700	B64290A0711X830					

Ferrites and accessories

Cautions and warnings

Mechanical stress and mounting

Ferrite cores have to meet mechanical requirements during assembling and for a growing number of applications. Since ferrites are ceramic materials one has to be aware of the special behavior under mechanical load.

As valid for any ceramic material, ferrite cores are brittle and sensitive to any shock, fast changing or tensile load. Especially high cooling rates under ultrasonic cleaning and high static or cyclic loads can cause cracks or failure of the ferrite cores.

For detailed information see chapter “*Definitions*”, section 8.1.

Effects of core combination on A_L value

Stresses in the core affect not only the mechanical but also the magnetic properties. It is apparent that the initial permeability is dependent on the stress state of the core. The higher the stresses are in the core, the lower is the value for the initial permeability. Thus the embedding medium should have the greatest possible elasticity.

For detailed information see chapter “*Definitions*”, section 8.2.

Heating up

Ferrites can run hot during operation at higher flux densities and higher frequencies.

NiZn-materials

The magnetic properties of NiZn-materials can change irreversible in high magnetic fields.

Processing notes

- The start of the winding process should be soft. Else the flanges may be destroyed.
- To strong winding forces may blast the flanges or squeeze the tube that the cores can no more be mount.
- To long soldering time at high temperature (>300 °C) may effect coplanarity or pin arrangement.
- Not following the processing notes for soldering of the J-leg terminals may cause solderability problems at the transformer because of pollution with Sn oxyd of the tin bath or burned insulation of the wire. For detailed information see chapter “*Processing notes*”, section 8.2.
- The dimensions of the hole arrangement have fixed values and should be understood as a recommendation for drilling the printed circuit board. For dimensioning the pins, the group of holes can only be seen under certain conditions, as they fit into the given hole arrangement. To avoid problems when mounting the transformer, the manufacturing tolerances for positioning the customers’ drilling process must be considered by increasing the hole diameter.

Ferrites and accessories
Symbols and terms

Symbol	Meaning	Unit
A	Cross section of coil	mm ²
A _e	Effective magnetic cross section	mm ²
A _L	Inductance factor; $A_L = L/N^2$	nH
A _{L1}	Minimum inductance at defined high saturation ($\cong \mu_a$)	nH
A _{min}	Minimum core cross section	mm ²
A _N	Winding cross section	mm ²
A _R	Resistance factor; $A_R = R_{Cu}/N^2$	$\mu\Omega = 10^{-6} \Omega$
B	RMS value of magnetic flux density	Vs/m ² , mT
ΔB	Flux density deviation	Vs/m ² , mT
\hat{B}	Peak value of magnetic flux density	Vs/m ² , mT
$\Delta \hat{B}$	Peak value of flux density deviation	Vs/m ² , mT
B _{DC}	DC magnetic flux density	Vs/m ² , mT
B _R	Remanent flux density	Vs/m ² , mT
B _S	Saturation magnetization	Vs/m ² , mT
C ₀	Winding capacitance	F = As/V
CDF	Core distortion factor	mm ^{-4.5}
DF	Relative disaccommodation coefficient $DF = d/\mu_i$	
d	Disaccommodation coefficient	
E _a	Activation energy	J
f	Frequency	s ⁻¹ , Hz
f _{cutoff}	Cut-off frequency	s ⁻¹ , Hz
f _{max}	Upper frequency limit	s ⁻¹ , Hz
f _{min}	Lower frequency limit	s ⁻¹ , Hz
f _r	Resonance frequency	s ⁻¹ , Hz
f _{Cu}	Copper filling factor	
g	Air gap	mm
H	RMS value of magnetic field strength	A/m
\hat{H}	Peak value of magnetic field strength	A/m
H _{DC}	DC field strength	A/m
H _c	Coercive field strength	A/m
h	Hysteresis coefficient of material	10 ⁻⁶ cm/A
h/ μ_i^2	Relative hysteresis coefficient	10 ⁻⁶ cm/A
I	RMS value of current	A
I _{DC}	Direct current	A
\hat{I}	Peak value of current	A
J	Polarization	Vs/m ²
k	Boltzmann constant	J/K
k ₃	Third harmonic distortion	
k _{3c}	Circuit third harmonic distortion	
L	Inductance	H = Vs/A

Ferrites and accessories
Symbols and terms

Symbol	Meaning	Unit
$\Delta L/L$	Relative inductance change	H
L_0	Inductance of coil without core	H
L_H	Main inductance	H
L_p	Parallel inductance	H
L_{rev}	Reversible inductance	H
L_s	Series inductance	H
l_e	Effective magnetic path length	mm
l_N	Average length of turn	mm
N	Number of turns	
P_{Cu}	Copper (winding) losses	W
P_{trans}	Transferrable power	W
P_V	Relative core losses	mW/g
PF	Performance factor	
Q	Quality factor ($Q = \omega L/R_s = 1/\tan \delta_L$)	
R	Resistance	Ω
R_{Cu}	Copper (winding) resistance ($f = 0$)	Ω
R_h	Hysteresis loss resistance of a core	Ω
ΔR_h	R_h change	Ω
R_i	Internal resistance	Ω
R_p	Parallel loss resistance of a core	Ω
R_s	Series loss resistance of a core	Ω
R_{th}	Thermal resistance	K/W
R_V	Effective loss resistance of a core	Ω
s	Total air gap	mm
T	Temperature	$^{\circ}\text{C}$
ΔT	Temperature difference	K
T_C	Curie temperature	$^{\circ}\text{C}$
t	Time	s
t_v	Pulse duty factor	
$\tan \delta$	Loss factor	
$\tan \delta_L$	Loss factor of coil	
$\tan \delta_r$	(Residual) loss factor at $H \rightarrow 0$	
$\tan \delta_e$	Relative loss factor	
$\tan \delta_h$	Hysteresis loss factor	
$\tan \delta/\mu_i$	Relative loss factor of material at $H \rightarrow 0$	
U	RMS value of voltage	V
\hat{U}	Peak value of voltage	V
V_e	Effective magnetic volume	mm^3
Z	Complex impedance	Ω
Z_n	Normalized impedance $ Z _n = Z /N^2 \times \varepsilon (l_e/A_e)$	Ω/mm

Ferrites and accessories

Symbols and terms

Symbol	Meaning	Unit
α	Temperature coefficient (TK)	1/K
α_F	Relative temperature coefficient of material	1/K
α_e	Temperature coefficient of effective permeability	1/K
ϵ_r	Relative permittivity	
Φ	Magnetic flux	Vs
η	Efficiency of a transformer	
η_B	Hysteresis material constant	mT ⁻¹
η_i	Hysteresis core constant	A ⁻¹ H ^{-1/2}
λ_s	Magnetostriction at saturation magnetization	
μ	Relative complex permeability	
μ_0	Magnetic field constant	Vs/Am
μ_a	Relative amplitude permeability	
μ_{app}	Relative apparent permeability	
μ_e	Relative effective permeability	
μ_i	Relative initial permeability	
μ_p'	Relative real (inductive) component of $\bar{\mu}$ (for parallel components)	
μ_p''	Relative imaginary (loss) component of $\bar{\mu}$ (for parallel components)	
μ_r	Relative permeability	
μ_{rev}	Relative reversible permeability	
μ_s'	Relative real (inductive) component of $\bar{\mu}$ (for series components)	
μ_s''	Relative imaginary (loss) component of $\bar{\mu}$ (for series components)	
μ_{tot}	Relative total permeability derived from the static magnetization curve	
ρ	Resistivity	Ωm^{-1}
$\Sigma l/A$	Magnetic form factor	mm ⁻¹
τ_{Cu}	DC time constant $\tau_{Cu} = L/R_{Cu} = A_L/A_R$	s
ω	Angular frequency; $\omega = 2 \pi f$	s ⁻¹

All dimensions are given in mm.

SMD Surface-mount device

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