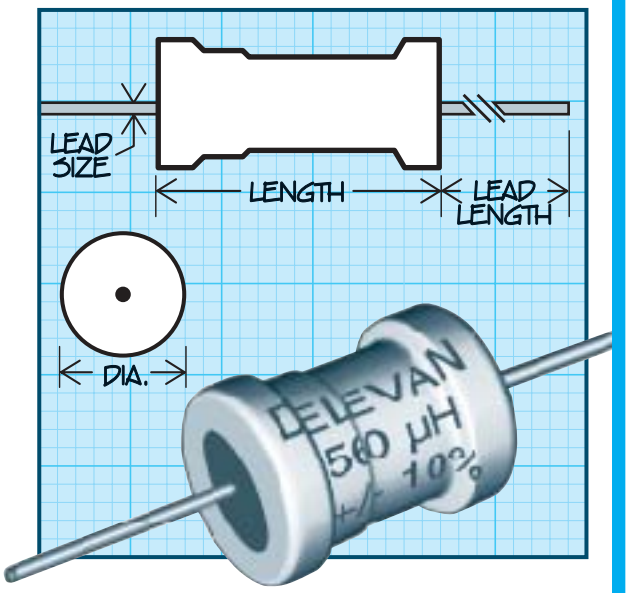
Series 4590

High Current Filter Inductors



Mechanical Configuration Ferrite Bobbin protected with a flame retardant polyolefin sleeve.

Physical Parameters

	Inches	Millimeters
Length	0.900 Max.	22.86 Max.
Diameter	0.455 Max	11.55 Max
Lead Size		
AWG #20 TCW	0.032 ± 0.002	0.813 ± 0.05
Lead Length	1.10 Min.	27.94 Min.

Operating Temperature
–55°C to +125°C
–55°C to +85°C @ full rated current

Current Rating at 85°C Ambient 40°C Rise

Maximum Power Dissipation at 85°C 0.70 W

Dielectric Withstanding Voltage 2500 V RMS

Inductance Measurement Inductance is measured @ 1KHz with 1 VAC open circuit and 0 dc bias.

Inductance Tolerance Tolerance is specified by suffixing an alpha character to the part number as follows: J = 5%, K = 10%, and L = 15%. Units are normally supplied to the tolerance indicated in table.

Marking Parts are printed with DELEVAN, Inductance Value and Tolerance.

High Saturation Bobbin allows for high inductance with low DCR.

High Resistivity Core offers very high parallel resistance, resulting in maximum coil performance.

Packaging Bulk only

PART NUMBER	NOMINAL INDUCTANCE (µH) ±10%	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (AMPS)	INCREMENTAL CURRENT DC (AMPS)
SERIES 4590				
4590-392K	3.9	0.007	9.75	8.2
4590-472K	4.7	0.008	9.11	7.5
4590-562K	5.6	0.011	7.77	6.9
4590-682K	6.8	0.011	7.60	6.3
4590-822K	8.2	0.013	7.15	5.7
4590-103K	10.0	0.016	6.44	5.2
4590-123K	12.0	0.018	6.07	4.7
4590-153K	15.0	0.020	5.76	4.3
4590-183K	18.0	0.022	5.49	3.9
4590-223K	22.0	0.024	5.26	3.5
4590-273K	27.0	0.025	5.15	3.2
4590-333K	33.0	0.028	4.87	2.9
4590-393K	39.0	0.031	4.63	2.7
4590-473K	47.0	0.034	4.45	2.5
4590-563K	56.0	0.043	3.93	2.3
4590-683K	68.0	0.059	3.355	2.1
4590-823K	82.0	0.066	3.175	1.9
4590-104K	100	0.084	2.815	1.7
4590-124K	120	0.113	2.43	1.6
4590-154K	150	0.129	2.27	1.4
4590-184K	180	0.150	2.105	1.3
4590-224K	220	0.162	2.025	1.2
4590-274K	270	0.226	1.715	1.1
4590-334K	330	0.257	1.61	0.95
4590-394K	390	0.288	1.52	0.88
4590-474K	470	0.393	1.30	0.80
4590-564K	560	0.504	1.15	0.74
4590-684K	680	0.570	1.08	0.67
4590-824K	820	0.643	1.015	0.61
4590-105K	1000	0.844	0.89	0.56
4590-125K	1200	0.977	0.825	0.51
4590-155K	1500	1.18	0.75	0.46
4590-185K	1800	1.50	0.665	0.42
4590-225K	2200	1.76	0.615	0.38
4590-275K	2700	2.13	0.56	0.34
4590-335K	3300	2.53	0.51	0.31
4590-395K	3900	2.84	0.48	0.29
4590-475K	4700	3.79	0.415	0.26
4590-565K	5600	4.24	0.395	0.24
4590-685K	6800	5.75	0.34	0.22
4590-825K	8200	6.44	0.32	0.20
4590-106K	10000	7.30	0.30	0.18
4590-126K	12000	9.34	0.265	0.17
4590-156K	15000	10.7	0.25	0.15
4590-186K	18000	14.8	0.21	0.14
4590-226K	22000	18.0	0.19	0.12
4590-276K	27000	22.7	0.17	0.11
4590-336K	33000	25.7	0.16	0.10
4590-396K	39000	29.7	0.15	0.09
4590-476K	47000	33.7	0.14	0.09
4590-566K	56000	38.0	0.13	0.08
4590-686K	68000	52.8	0.11	0.07
4590-826K	82000	67.3	0.10	0.07
4590-107K	100000	76.0	0.09	0.06

Optional Tolerances: J = 5% L = 15%

Incremental Current is the current which will decrease the inductance by approximately 5%.