



31000 SERIES

QPL: M83446/09

VARIABLE INDUCTOR



NEW: T LEVEL QUALIFIED

MIL-PRF-83446

Nominal Inductance Range (uH)	Typical Q	Current Rating (mA)
0.018 to 120	22 to 55	22 to 750

ELECTRICAL SPECIFICATIONS

- Tunable inductance to meet specific requirements.
- Resistance to Solder Heat: 260°C for 10 seconds
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -60°C to +130°C
- Temperature Rise: 30°C Max at 90°C Ambient
- Temperature Coefficient of Inductance
 - P/N 31000 thru 31011: +125 PPM/oC Max.
 - P/N 31012 thru 31048: +80 PPM/oC Max.

FEATURES

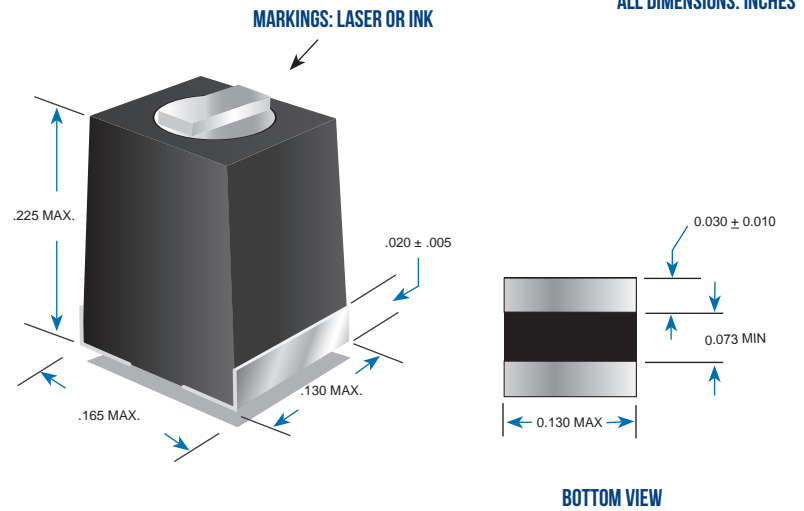
- Transfer Molded Package
- Internal Welded Terminations
- Terminations: Tin-lead over phosphor bronze
- Optional Termination on Request: Gold plated terminations
- Tape and Reel Packaging Available
- Recommended Mounting Technique
 - Reflow or Vapor Phase Soldering
 - Conductive Epoxy
 - Wire bonding (gold lead only)

APPLICATIONS

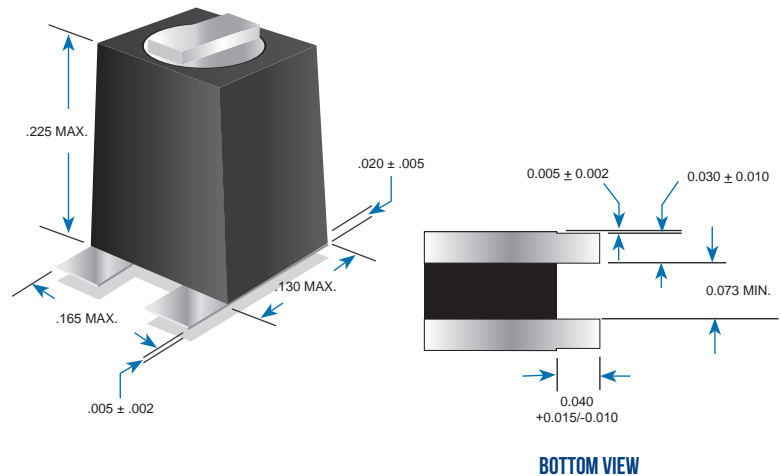
- Additional Application Grades Available:
 - Space Grade (MIL-STD-981)
 - Commercial Grade or Equivalent

CUSTOM DESIGNS & MODIFICATIONS:
Other electrical configurations and performance characteristics are available in various sizes and package types

NO TABS



WITH TABS



31000 SERIES





DATA TABLE

WITH TAB TERMINATIONS		WITHOUT TAB TERMINATIONS		Inductance (uH)	Test Freq (MHz)	Q Min	SRF Min (MHz)	DCR Max (Ohms)	Current Max (mA)
M83446/9 Dash No.	VE P/N	M83446/9 Dash No.	VE P/N						
-01	31000	-48	31000-NT	0.018	150	50	1200	0.03	750
-02	31001	-49	31001-NT	0.022	150	55	1100	0.03	750
-03	31002	-50	31002-NT	0.027	150	55	1000	0.03	750
-04	31003	-51	31003-NT	0.033	150	55	900	0.04	750
-05	31004	-52	31004-NT	0.039	150	55	750	0.04	750
-06	31005	-53	31005-NT	0.047	100	55	660	0.04	750
-07	31006	-54	31006-NT	0.056	100	55	610	0.05	700
-08	31007	-55	31007-NT	0.068	100	55	550	0.05	700
-09	31008	-56	31008-NT	0.082	100	55	520	0.06	645
-10	31009	-57	31009-NT	0.10	100	55	490	0.06	645
-11	31010	-58	31010-NT	0.12	50	50	460	0.07	600
-12	31011	-59	31011-NT	0.15	50	50	430	0.08	560
-13	31012	-60	31012-NT	0.18	50	50	385	0.09	525
-14	31013	-61	31013-NT	0.22	50	45	330	0.10	500
-15	31014	-62	31014-NT	0.27	50	45	300	0.15	400
-16	31015	-63	31015-NT	0.33	50	45	275	0.19	360
-17	31016	-64	31016-NT	0.39	50	40	240	0.25	300
-18	31017	-65	31017-NT	0.47	25	40	210	0.30	280
-19	31018	-66	31018-NT	0.56	25	40	190	0.40	250
-20	31019	-67	31019-NT	0.68	25	40	165	0.60	200
-21	31020	-68	31020-NT	0.82	25	40	155	0.70	180
-22	31021	-69	31021-NT	1.0	25	40	140	0.90	160
-23	31022	-70	31022-NT	1.2	25	35	125	1.10	150
-24	31023	-71	31023-NT	1.5	7.9	30	115	1.30	135
-25	31024	-72	31024-NT	1.8	7.9	30	105	1.70	120
-26	31025	-73	31025-NT	2.2	7.9	30	100	2.3	100
-27	31026	-74	31026-NT	2.7	7.9	25	85	3.0	90
-28	31027	-75	31027-NT	3.3	7.9	25	75	3.9	80
-29	31028	-76	31028-NT	3.9	7.9	25	47	3.9	80
-30	31029	-77	31029-NT	4.7	7.9	25	30	3.9	80
-31	31030	-78	31030-NT	5.6	7.9	22	24	4.0	75
-32	31031	-79	31031-NT	6.8	7.9	22	23	4.0	75
-33	31032	-80	31032-NT	8.2	7.9	22	22	4.5	72
-34	31033	-81	31033-NT	10	7.9	22	21	4.5	72

CUSTOM DESIGNS & MODIFICATIONS:

Other electrical configurations and performance characteristics are available in various sizes and package types

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DATA TABLE

WITH TAB TERMINATIONS		WITHOUT TAB TERMINATIONS		Inductance (uH)	Test Freq (MHz)	Q Min	SRF Min (MHz)	DCR Max (Ohms)	Current Max (mA)
M83446/9 Dash No.	VE P/N	M83446/9 Dash No.	VE P/N						
-35	31034	-82	31034-NT	12	7.9	22	17	5.0	70
-36	31035	-83	31035-NT	15	2.5	22	15	6.0	65
-37	31036	-84	31036-NT	18	2.5	22	14	8.0	55
-38	31037	-85	31037-NT	22	2.5	22	13	10.0	50
-39	31038	-86	31038-NT	27	2.5	22	11	11.0	45
-40	31039	-87	31039-NT	33	2.5	22	10	13.0	43
-41	31040	-88	31040-NT	39	2.5	22	9	14.0	42
-42	31041	-89	31041-NT	47	2.5	22	8	15.0	40
-43	31042	-90	31042-NT	56	2.5	22	7	19.0	36
-44	31043	-91	31043-NT	68	2.5	22	6	24.0	32
-45	31044	-92	31044-NT	82	2.5	25	5	31.0	28
-46	31045	-93	31045-NT	100	2.5	25	4	40.0	25
-47	31046	-94	31046-NT	120	2.5	25	3	50.0	22

VE PART NUMBER STRUCTURE KEY

EXAMPLE: X31001-NT-F-K

PREFIX

TABS

TERMINATION

TOLERANCE

T	T Level
NONE	Standard M Level (QPL)

T	With Tabs
NT	Without Tabs

F	Tin Lead (Standard)
G	Gold

M	20%
K	10%
J	5%
*H	3%
*G	2%
*F	1%

* Consult Factory

M83446 PART NUMBER STRUCTURE KEY

M83446/XX-AAZY

XX = SLASH SHEET

AA = DASH NUMBER

Y = TERMINATION (F=TIN/LEAD, A=GOLD)

Z = TOLERANCE

M=20%, K=10%, J=5%, G=2%, F=1% (Consult factory on G & F availability)

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