



## 33000 SERIES

QPL: M83446/10



### MIL-PRF-83446

Inductance Range (uH)	Typical Q	Current Rating (mA)
0.10 to 10000	85 to 140	21 to 1000

### ELECTRICAL SPECIFICATIONS

- **Inductance Range:** 0.10 uH to 1000 uH
- **Inductance Tolerance:** Standard is  $\pm 10\%$ , tighter tolerance available upon request
- **Resistance to Solder Heat:** 260°C for 10 seconds
- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +13°C
- **Temperature Rise:** 30°C Max at 90°C Ambient
- **Temperature Coefficient of Inductance**
  - P/N 33000 thru 33060: +1600 PPM/°C Max

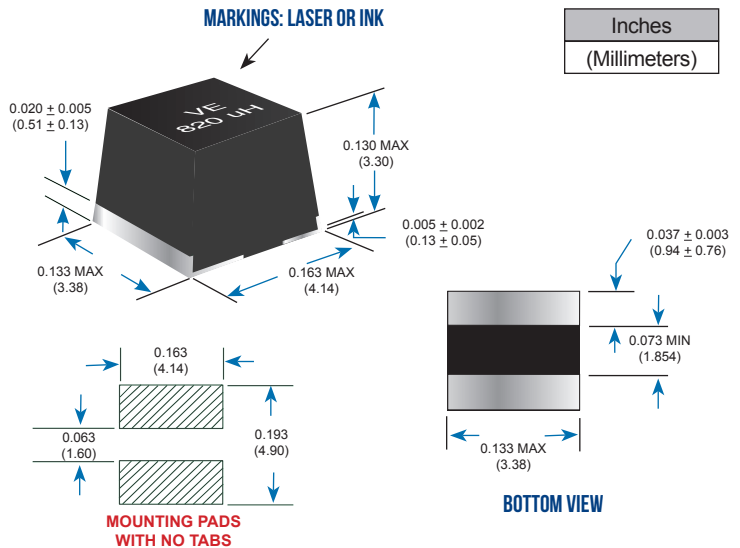
### FEATURES

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

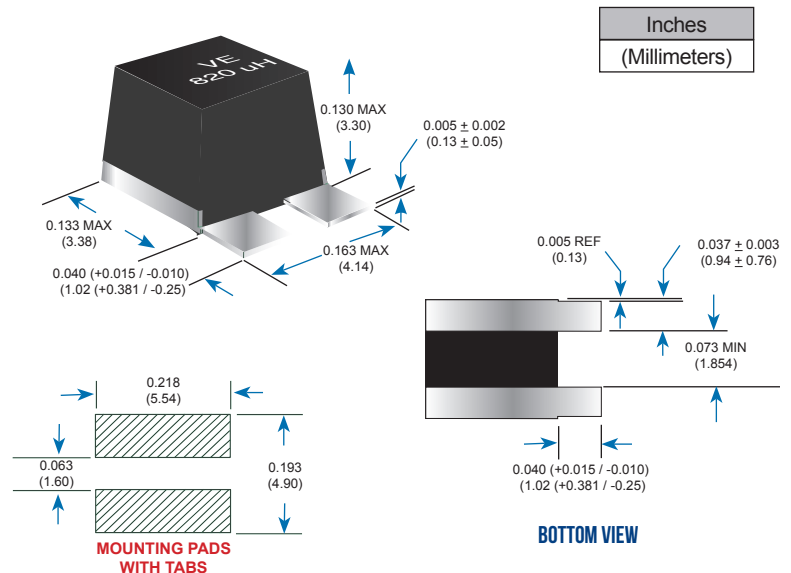
### APPLICATIONS

- **Additional Application Grades Available:**
  - Space Grade (MIL-STD-981)
  - High Temperature Grade (+200°C)
  - Commercial Grade or Equivalent

### NO TABS



### WITH TABS





### DATA TABLE

WITH TAB TERMINATIONS		WITHOUT TAB TERMINATIONS		Inductance (uH)	Q (Min)	Q (Typ)	Test Freq (MHz)	SRF Min (MHz)	DCR Max (Ohms)	Current Max (mA)
VE P/N	M83446/10 Dash No.	VE P/N	M83446/10 Dash No.							
33000	-01	33000 NT	-62	0.010	60	65	150	2000	0.04	1000
33001	-02	33001 NT	-63	0.012	70	82	150	1800	0.04	1000
33002	-03	33002 NT	-64	0.015	75	87	150	1500	0.04	1000
33003	-04	33003 NT	-65	0.018	75	87	150	1500	0.04	1000
33004	-05	33004 NT	-66	0.022	60	65	100	1300	0.05	1000
33005	-06	33005 NT	-67	0.027	60	70	100	1300	0.05	1000
33006	-07	33006 NT	-68	0.033	60	70	100	1000	0.05	1000
33007	-08	33007 NT	-69	0.039	60	70	100	1000	0.06	900
33008	-09	33008 NT	-70	0.047	65	75	100	800	0.06	900
33009	-10	33009 NT	-71	0.056	65	75	100	760	0.06	900
33010	-11	33010 NT	-72	0.068	65	75	100	700	0.07	840
33011	-12	33011 NT	-73	0.082	65	75	100	650	0.07	840
33012	-13	33012 NT	-74	0.100	65	77	50	570	0.07	840
33013	-14	33013 NT	-75	0.120	65	77	50	520	0.07	840
33014	-15	33014 NT	-76	0.150	75	87	50	400	0.08	790
33015	-16	33015 NT	-77	0.180	75	87	50	360	0.08	790
33016	-17	33016 NT	-78	0.220	70	80	50	320	0.08	790
33017	-18	33017 NT	-79	0.270	70	80	50	270	0.10	700
33018	-19	33018 NT	-80	0.330	70	80	50	240	0.10	700
33019	-20	33019 NT	-81	0.390	70	80	50	220	0.10	700
33020	-21	33020 NT	-82	0.470	70	80	25	190	0.14	590
33021	-22	33021 NT	-83	0.560	70	82	25	170	0.19	510
33022	-23	33022 NT	-84	0.680	70	83	25	160	0.26	430
33023	-24	33023 NT	-85	0.820	75	84	25	150	0.30	400
33024	-25	33024 NT	-86	1.00	75	87	25	130	0.34	380
33025	-26	33025 NT	-87	1.20	65	73	7.9	120	0.45	330
33026	-27	33026 NT	-88	1.50	65	73	7.9	110	0.57	290
33027	-28	33027 NT	-89	1.80	65	73	7.9	100	0.72	260
33028	-29	33028 NT	-90	2.20	65	73	7.9	80	0.9	230
33029	-30	33029 NT	-91	2.70	65	73	7.9	60	1.1	210
33030	-31	33030 NT	-92	3.30	60	70	7.9	50	1.2	200
33031	-32	33031 NT	-93	3.90	60	70	7.9	45	1.4	180
33032	-33	33032 NT	-94	4.70	60	70	7.9	42	1.6	170
33033	-34	33033 NT	-95	5.60	65	75	7.9	40	1.8	160
33034	-35	33034 NT	-96	6.80	65	75	7.9	37	2.4	140
33035	-36	33035 NT	-97	8.20	65	75	7.9	34	3.0	130
33036	-37	33036 NT	-98	10.0	65	75	7.9	29	3.5	120
33037	-38	33037 NT	-99	12.0	60	70	2.5	27	3.6	118
33038	-39	33038 NT	-100	15.0	60	70	2.5	22	3.7	115

#### CUSTOM DESIGNS & MODIFICATIONS:

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

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WITH TAB TERMINATIONS		WITHOUT TAB TERMINATIONS		Inductance (uH)	Q (Min)	Q (Typ)	Test Freq (MHz)	SRF Min (MHz)	DCR Max (Ohms)	Current Max (mA)
VE P/N	M83446/10 Dash No.	VE P/N	M83446/10 Dash No.							
33039	-40	33039 NT	-101	18.0	60	72	2.5	17	3.8	114
33040	-41	33040 NT	-102	22.0	60	72	2.5	16	3.9	113
33041	-42	33041 NT	-103	27.0	65	75	2.5	15	4	110
33042	-43	33042 NT	-104	33.0	65	75	2.5	14	5	100
33043	-44	33043 NT	-105	39.0	65	75	2.5	13	7	84
33044	-45	33044 NT	-106	47.0	70	78	2.5	12	8	79
33045	-46	33045 NT	-107	56.0	70	78	2.5	11	10	70
33046	-47	33046 NT	-108	68.0	65	75	2.5	10	11	67
33047	-48	33047 NT	-109	82.0	60	72	2.5	9	12	64
33048	-49	33048 NT	-110	100	60	70	2.5	8	13	62
33049	-50	33049 NT	-111	120	40	48	0.79	7	14	59
33050	-51	33050 NT	-112	150	40	48	0.79	6	16	56
33051	-52	33051 NT	-113	180	40	48	0.79	5	18	52
33052	-53	33052 NT	-114	220	40	48	0.79	4	24	45
33053	-54	33053 NT	-115	270	40	48	0.79	3.3	25	44
33054	-55	33054 NT	-116	330	40	48	0.79	3.1	29	41
33055	-56	33055 NT	-117	390	40	48	0.79	2.9	32	39
33056	-57	33056 NT	-118	470	35	45	0.79	2.4	35	37
33057	-58	33057 NT	-119	560	35	45	0.79	2.1	45	33
33058	-59	33058 NT	-120	680	35	40	0.79	1.9	55	30
33059	-60	33059 NT	-121	820	30	36	0.79	1.8	70	26
33060	-61	33060 NT	-122	1000	30	36	0.79	1.7	80	25

### Test Fixtures and Equipment:

To assure accurate measurement of Inductance and Q, use test fixtures and equipment specified in Technical Information on VE1.com.

