



## C33000 SERIES

REF: M83446/10



RoHS VERSION AVAILABLE

COTS+

Inductance Range (uH)	Typical Q	Current Rating (mA)
0.10 to 1000	28 to 74	21 to 850

### 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 +130°C
- **Temperature Rise:** 30°C Max at 90°C Ambient
- **Temperature Coefficient of Inductance**  
– P/N C33000 thru C33060: +1600 PPM/°C Max.

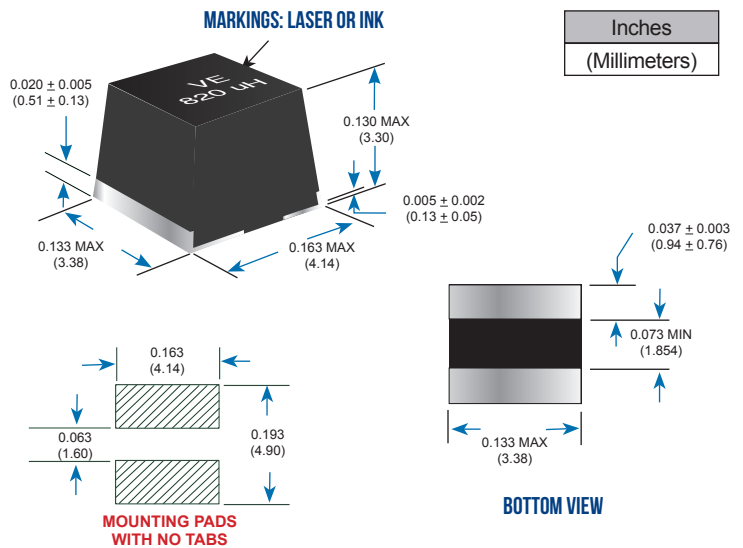
### FEATURES

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

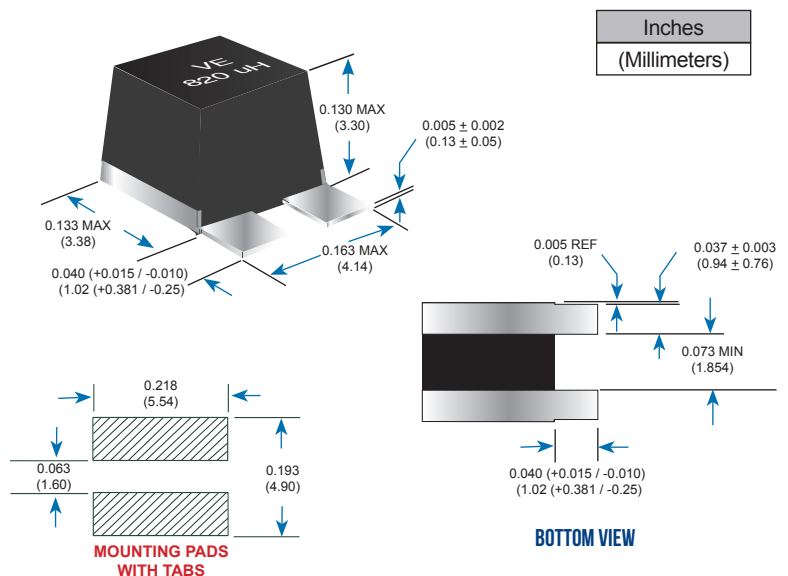
### APPLICATIONS

- **Additional Application Grades Available:**
  - Military Grade (MIL-PRF-83446)
  - Space Grade (MIL-STD-981)
  - High temperature Grade (+200°C)

### NO TABS



### WITH TABS





DATA TABLE

WITH TAB TERMINATIONS	WITHOUT TAB TERMINATIONS							
VE P/N	VE P/N	Inductance Nom (uH)	Q Min	Q Typ	Test Freq (MHz)	SRF Min (MHz)	DCR Max (Ohms)	Current Max (mA)
C33000	C33000 NT	0.010	50	54	150	1700	0.05	850
C33001	C33001 NT	0.012	59	63	150	1530	0.05	850
C33002	C33002 NT	0.015	59	63	150	1270	0.05	850
C33003	C33003 NT	0.018	59	63	150	1270	0.05	850
C33004	C33004 NT	0.022	50	54	100	1100	0.06	850
C33005	C33005 NT	0.027	50	59	100	1100	0.06	850
C33006	C33006 NT	0.033	50	59	100	850	0.06	850
C33007	C33007 NT	0.039	50	59	100	850	0.07	760
C33008	C33008 NT	0.047	54	63	100	680	0.07	760
C33009	C33009 NT	0.056	54	63	100	640	0.07	760
C33010	C33010 NT	0.068	54	63	100	590	0.09	710
C33011	C33011 NT	0.082	54	63	100	550	0.09	710
C33012	C33012 NT	0.100	54	65	50	480	0.09	710
C33013	C33013 NT	0.120	54	65	50	440	0.09	710
C33014	C33014 NT	0.150	63	74	50	340	0.10	670
C33015	C33015 NT	0.180	63	74	50	300	0.10	670
C33016	C33016 NT	0.220	59	65	50	270	0.10	670
C33017	C33017 NT	0.270	59	65	50	220	0.12	590
C33018	C33018 NT	0.330	59	65	50	200	0.12	590
C33019	C33019 NT	0.390	59	65	50	180	0.12	590
C33020	C33020 NT	0.470	59	65	25	160	0.17	500
C33021	C33021 NT	0.560	59	59	25	140	0.22	430
C33022	C33022 NT	0.680	59	70	25	130	0.30	360
C33023	C33023 NT	0.820	63	71	25	120	0.35	340
C33024	C33024 NT	1.00	63	74	25	110	0.40	320
C33025	C33025 NT	1.20	54	61	7.9	100	0.52	280
C33026	C33026 NT	1.50	54	61	7.9	93	0.66	240
C33027	C33027 NT	1.80	54	61	7.9	85	0.83	220
C33028	C33028 NT	2.20	54	61	7.9	68	1.0	190
C33029	C33029 NT	2.70	54	61	7.9	51	1.3	170
C33030	C33030 NT	3.30	50	56	7.9	42	1.4	170
C33031	C33031 NT	3.90	50	56	7.9	38	1.6	150
C33032	C33032 NT	4.70	50	56	7.9	35	1.8	140
C33033	C33033 NT	5.60	54	63	7.9	34	2.1	130
C33034	C33034 NT	6.80	54	63	7.9	31	2.8	110
C33035	C33035 NT	8.20	54	63	7.9	28	3.5	110
C33036	C33036 NT	10.0	54	63	7.9	24	4.0	100
C33037	C33037 NT	12.0	47	54	2.5	22	4.1	100
C33038	C33038 NT	15.0	47	54	2.5	18	4.3	97

**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 Nom (uH)	Q Min	Q Typ	Test Freq (MHz)	SRF Min (MHz)	DCR Max (Ohms)	Current Max (mA)
VE P/N	VE P/N							
C33039	C33039 NT	18.0	47	54	2.5	14	4.4	96
C33040	C33040 NT	22.0	47	54	2.5	13	4.5	96
C33041	C33041 NT	27.0	51	60	2.5	12	4.6	93
C33042	C33042 NT	33.0	51	60	2.5	11	5.8	85
C33043	C33043 NT	39.0	51	60	2.5	11	8.1	71
C33044	C33044 NT	47.0	51	59	2.5	10	9.2	67
C33045	C33045 NT	56.0	51	59	2.5	9.3	12	59
C33046	C33046 NT	68.0	51	59	2.5	8.5	13	56
C33047	C33047 NT	82.0	47	54	2.5	7.6	14	54
C33048	C33048 NT	100	47	54	2.5	6.8	15	52
C33049	C33049 NT	120	29	36	0.79	5.9	16	50
C33050	C33050 NT	150	29	36	0.79	5.1	18	47
C33051	C33051 NT	180	29	36	0.79	4.2	21	44
C33052	C33052 NT	220	29	36	0.79	3.4	28	38
C33053	C33053 NT	270	29	36	0.79	2.8	29	37
C33054	C33054 NT	330	29	36	0.79	2.6	33	34
C33055	C33055 NT	390	27	33	0.79	2.4	37	33
C33056	C33056 NT	470	27	33	0.79	2.0	40	31
C33057	C33057 NT	560	27	33	0.79	1.7	52	28
C33058	C33058 NT	680	27	32	0.79	1.6	63	25
C33059	C33059 NT	820	23	28	0.79	1.5	81	22
C33060	C33060 NT	1000	23	28	0.79	1.4	92	21

### Test Fixtures and Equipment:

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

