

SPACE APPLICATION PRODUCTS

High Q Chip Inductors

M83446/10

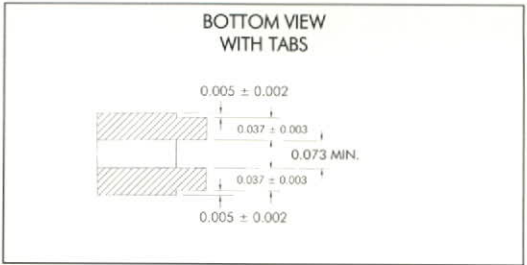
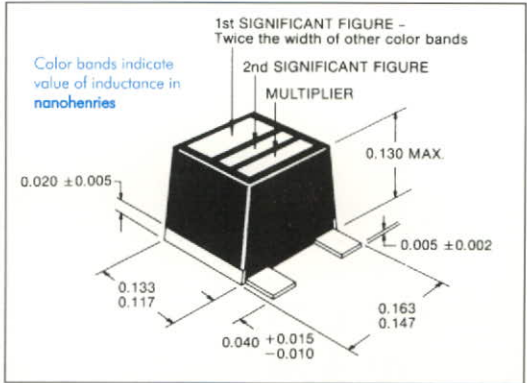
Qualified Product Listed on MIL-C-83446

Mil-Std-981, Class "S"

IN	MM
0.163	4.140
0.147	3.734
0.133	3.378
0.130	3.302
0.117	2.972
0.073	1.854
0.040	1.016
0.037	0.940
0.020	0.508
0.015	0.381
0.010	0.254
0.005	0.127
0.003	0.076
0.002	0.051

CONVERSION

WITH TAB TERMINATIONS		WITHOUT TAB TERMINATIONS		ACTUAL SIZE							
M83446/10 Dash No.	VE P/N	M83446/10 Dash No.	VE P/N	Inductance uH	Min Q	Typ Q	Test Freq MHz	SRF MHz	DCR Ohms	Current mA	
-01	S33000	-62	S33000 NT	0.010	60	65	150	2000	0.04	1000	
-02	S33001	-63	S33001 NT	0.012	70	82	150	1800	0.04	1000	
-03	S33002	-64	S33002 NT	0.015	75	87	150	1500	0.04	1000	
-04	S33003	-65	S33003 NT	0.018	75	87	150	1500	0.04	1000	
-05	S33004	-66	S33004 NT	0.022	60	65	100	1300	0.05	1000	
-06	S33005	-67	S33005 NT	0.027	60	70	100	1300	0.05	1000	
-07	S33006	-68	S33006 NT	0.033	60	70	100	1000	0.05	1000	
-08	S33007	-69	S33007 NT	0.039	60	70	100	1000	0.06	900	
-09	S33008	-70	S33008 NT	0.047	65	75	100	800	0.06	900	
-10	S33009	-71	S33009 NT	0.056	65	75	100	760	0.06	900	
-11	S33010	-72	S33010 NT	0.068	65	75	100	700	0.07	840	
-12	S33011	-73	S33011 NT	0.082	65	75	100	650	0.07	840	
-13	S33012	-74	S33012 NT	0.100	65	77	50	570	0.07	840	
-14	S33013	-75	S33013 NT	0.120	65	77	50	520	0.07	840	
-15	S33014	-76	S33014 NT	0.150	75	87	50	400	0.08	790	
-16	S33015	-77	S33015 NT	0.180	75	87	50	360	0.08	790	
-17	S33016	-78	S33016 NT	0.220	70	80	50	320	0.08	790	
-18	S33017	-79	S33017 NT	0.270	70	80	50	270	0.10	700	
-19	S33018	-80	S33018 NT	0.330	70	80	50	240	0.10	700	
-20	S33019	-81	S33019 NT	0.390	70	80	50	220	0.10	700	
-21	S33020	-82	S33020 NT	0.470	70	80	25	190	0.14	590	
-22	S33021	-83	S33021 NT	0.560	70	82	25	170	0.19	510	
-23	S33022	-84	S33022 NT	0.680	70	83	25	160	0.26	430	
-24	S33023	-85	S33023 NT	0.820	75	84	25	150	0.30	400	
-25	S33024	-86	S33024 NT	1.00	75	87	25	130	0.34	380	
-26	S33025	-87	S33025 NT	1.20	65	73	7.9	120	0.45	330	
-27	S33026	-88	S33026 NT	1.50	65	73	7.9	110	0.57	290	
-28	S33027	-89	S33027 NT	1.80	65	73	7.9	100	0.72	260	
-29	S33028	-90	S33028 NT	2.20	65	73	7.9	80	0.9	230	
-30	S33029	-91	S33029 NT	2.70	65	73	7.9	60	1.1	210	
-31	S33030	-92	S33030 NT	3.30	60	70	7.9	50	1.2	200	
-32	S33031	-93	S33031 NT	3.90	60	70	7.9	45	1.4	180	
-33	S33032	-94	S33032 NT	4.70	60	70	7.9	42	1.6	170	
-34	S33033	-95	S33033 NT	5.60	65	75	7.9	40	1.8	160	
-35	S33034	-96	S33034 NT	6.80	65	75	7.9	37	2.4	140	
-36	S33035	-97	S33035 NT	8.20	65	75	7.9	34	3.0	130	
-37	S33036	-98	S33036 NT	10.0	65	75	7.9	29	3.5	120	
-38	S33037	-99	S33037 NT	12.0	60	70	2.5	27	3.6	118	
-39	S33038	-100	S33038 NT	15.0	60	70	2.5	22	3.7	115	
-40	S33039	-101	S33039 NT	18.0	60	72	2.5	17	3.8	114	
-41	S33040	-102	S33040 NT	22.0	60	72	2.5	16	3.9	113	
-42	S33041	-103	S33041 NT	27.0	65	75	2.5	15	4	110	
-43	S33042	-104	S33042 NT	33.0	65	75	2.5	14	5	100	
-44	S33043	-105	S33043 NT	39.0	65	75	2.5	13	7	84	
-45	S33044	-106	S33044 NT	47.0	70	78	2.5	12	8	79	
-46	S33045	-107	S33045 NT	56.0	70	78	2.5	11	10	70	
-47	S33046	-108	S33046 NT	68.0	65	75	2.5	10	11	67	
-48	S33047	-109	S33047 NT	82.0	60	72	2.5	9	12	64	
-49	S33048	-110	S33048 NT	100	60	70	2.5	8	13	62	
-50	S33049	-111	S33049 NT	120	40	48	0.79	7	14	59	
-51	S33050	-112	S33050 NT	150	40	48	0.79	6	16	56	
-52	S33051	-113	S33051 NT	180	40	48	0.79	5	18	52	
-53	S33052	-114	S33052 NT	220	40	48	0.79	4	24	45	
-54	S33053	-115	S33053 NT	270	40	48	0.79	3.3	25	44	
-55	S33054	-116	S33054 NT	330	40	48	0.79	3.1	29	41	
-56	S33055	-117	S33055 NT	390	40	48	0.79	2.9	32	39	



Operating Temperature:
-55 °C to +125 °C

Standard Terminations:
Phosphor bronze with tin-lead coating, welded internal connections.

Optional Terminations:
Gold plated terminations on request, add suffix "G" to Vanguard part number when ordering.

Inductance Tolerance:
±10%, tighter tolerances and other inductance values up to 1000 uH on request.

Part Numbers S33000 & S33000 NT thru S33027 & S33027 NT:
TCL = + 60 PPM/°C Max.

Part Numbers S33028 & S33028 NT thru S33036 & S33036 NT:
TCL = + 80 PPM/°C Max.,
TCQ = -0.13%/°C Max.

Part Numbers S33037 & S33037 NT thru S33048 & S33048 NT:
TCL = + 80 PPM/°C Max.

Part Numbers S33049 & S33049 NT thru S33055 & S33055 NT:
TCL = +300 PPM/°C Max.

Note: Devices measuring 470 uH through 1000 uH (not shown on this chart) are available as Mil-Std-981, Class "S" by issuing a waiver to the wire size requirement.

Test Fixtures and Equipment:
To assure accurate measurement of Inductance and Q, use test fixtures and equipment specified in Technical Information section of this catalog.

S 33,000 SERIES



VANGUARD ELECTRONICS
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