



## Space Application Products

# Chip Inductors

## M83446/6 - Series S 50,000

Qualified Product Listed MIL-PRF-83446

Mil-Std-981, Class "S"

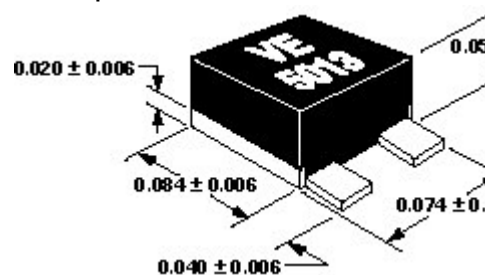
M83446/6 - Series S 50,000										
With Tab Terminations		Without Tab Terminations								
M83446/6 Dash Number	VE Part Number	M83446/6 Dash Number	VE Part Number	Inductance uH	Min Q	Typ Q	Test Freq. MHz	SRF Mhz Min	DCR Ohms Max	Current mA Max
-49	S50001	-88	S50001	0.005	32	40	200	1900	0.10	750
-50	S50002	-89	NT	0.008	32	40	200	1800	0.10	750
-51	S50003	-90	S50002	0.010	32	40	150	1700	0.10	750
-52	S50004	-91	NT	0.012	32	40	150	1500	0.10	750
-53	S50005	-92	S50003	0.015	29	37	150	1300	0.10	750
			NT							
-54	S50006	-93	S50004	0.018	29	37	150	1100	0.10	750
-55	S50007	-94	NT	0.022	35	43	100	900	0.10	750
-56	S50008	-95	S50005	0.027	34	42	100	900	0.10	750
-57	S50009	-96	NT	0.033	32	41	100	800	0.10	600
-58	S50010	-97		0.039	32	41	100	750	0.10	550
			S50006							
-59	S50011	-98	NT	0.047	32	41	100	750	0.10	500
-60	S50012	-99	S50007	0.056	32	41	100	700	0.10	450
-61	S50013	-100	NT	0.068	32	41	100	700	0.12	400
-62	S50014	-101	S50008	0.082	32	40	100	700	0.13	350
-63	S50015	-102	NT	0.10	32	40	50	600	0.14	350
			S50009							
-64	S50016	-103	NT	0.12	32	40	50	500	0.17	350
-65	S50017	-104	S50010	0.15	32	40	50	500	0.18	350
-66	S50018	-105	NT	0.18	32	40	50	450	0.25	300
-67	S50019	-106		0.22	32	40	50	400	0.30	300
-68	S50020	-107	S50011	0.27	30	39	50	330	0.40	300
			NT							
-69	S50021	-108	S50012	0.33	30	39	50	270	0.50	300
-70	S50022	-109	NT	0.39	24	31	50	250	0.90	250
-71	S50023	-110	S50013	0.47	24	31	25	200	0.90	250
-72	S50024	-111	NT	0.56	24	31	25	180	1.10	250
-73	S50025	-112	S50014	0.68	24	31	25	150	1.20	250
			NT							
-74	S50026	-113	S50015	0.82	24	31	25	130	1.40	250
-75	S50027	-114	NT	1.0	24	31	25	110	1.40	250
-76	S50028	-115		1.2	21	28	7.9	110	1.50	200
-77	S50029	-116	S50016	1.5	21	28	7.9	110	1.50	200
-78	S50030	-117	NT	1.8	21	28	7.9	100	1.60	200
			S50017							

-79	S50031	-118	NT	2.2	21	28	7.9	90	1.60	150
			S50018							
			NT							
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			NT							

**Note:** Devices measuring 2.7 uH through 10.0 uH (not shown on this chart) are available as Mil-Std-981, Class "S" by issuing a waiver to the wire size requirement.

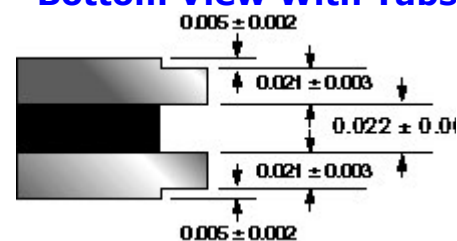
### Specifications

- **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:**  
±20% for part numbers S50001 to S50002  
(includes NT p/ns)



Marking Examples:  
**5008** for Part Number 50008  
**5013** for Part Number 50013

### Bottom View With Tabs



±10% for part numbers S50003 to S50031

(includes NT p/ns)

Tighter tolerances and other inductance values up to 10 uH on request.

- **Part Numbers S50001 & S50001 NT thru S50031 & S50031 NT:**  
TCL = + 125 PPM/°C Max.

### Test Fixtures and Equipment

To assure accurate measurement of Inductance and Q, use test fixtures and equipment specified in Technical Information section of the catalog.

Conversion	
IN	MM
0.084	2.134
0.074	1.880
0.050	1.270
0.040	1.016
0.026	0.660
0.022	0.559
0.020	0.508
0.006	0.152
0.005	0.127
0.004	0.101
0.003	0.076
0.002	0.050



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