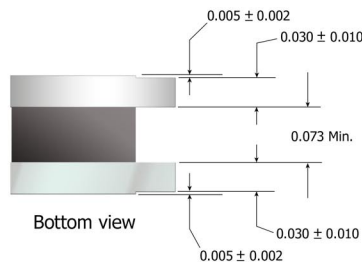
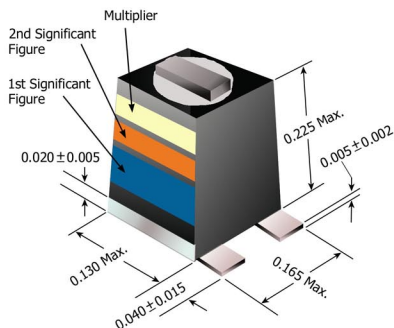


# 9000 Series

## Variable Chip Inductors

## M83446/9



### FEATURES

- Military QPL Approved.
- Pick-and-place compatible.

### SPECIFICATIONS

- Operating temperature range: -55°C to +125°C
- Weight: 0.5 gram maximum.
- Inductance requirement: Tighter tolerances and other inductance values on request.
- Termination finish:  
A: Gold.  
F: Tin-lead.  
Solderability per MIL-STD-202, Method 208.
- Space Application: Available to MIL-STD-981.
- Outgassing: TML < 1%.

| With Tabs            |           | Without Tabs         |           | Inductance (µH) |       |       | Q Min | Test       | SRF         | DCR          | Current    |
|----------------------|-----------|----------------------|-----------|-----------------|-------|-------|-------|------------|-------------|--------------|------------|
| Mil Spec Dash Number | C/ACM P/N | Mil Spec Dash Number | C/ACM P/N | Min             | Nom   | Max   | At L  | Freq (MHz) | (min) (MHz) | (max) (Ohms) | (max) (mA) |
| M83446/09-01         | 9001      | M83446/09-48         | 9048      | 0.015           | 0.018 | 0.021 | 50    | 150        | 1200        | 0.03         | 750        |
| M83446/09-02         | 9002      | M83446/09-49         | 9049      | 0.018           | 0.022 | 0.026 | 55    | 150        | 1100        | 0.03         | 750        |
| M83446/09-03         | 9003      | M83446/09-50         | 9050      | 0.022           | 0.027 | 0.032 | 55    | 150        | 1000        | 0.03         | 750        |
| M83446/09-04         | 9004      | M83446/09-51         | 9051      | 0.027           | 0.033 | 0.039 | 55    | 150        | 900         | 0.04         | 750        |
| M83446/09-05         | 9005      | M83446/09-52         | 9052      | 0.033           | 0.039 | 0.047 | 55    | 150        | 750         | 0.04         | 750        |
| M83446/09-06         | 9006      | M83446/09-53         | 9053      | 0.039           | 0.047 | 0.056 | 55    | 100        | 660         | 0.04         | 750        |
| M83446/09-07         | 9007      | M83446/09-54         | 9054      | 0.047           | 0.056 | 0.068 | 55    | 100        | 610         | 0.05         | 700        |
| M83446/09-08         | 9008      | M83446/09-55         | 9055      | 0.055           | 0.068 | 0.082 | 55    | 100        | 550         | 0.05         | 700        |
| M83446/09-09         | 9009      | M83446/09-56         | 9056      | 0.067           | 0.082 | 0.100 | 55    | 100        | 520         | 0.06         | 645        |
| M83446/09-10         | 9010      | M83446/09-57         | 9057      | 0.080           | 0.100 | 0.120 | 55    | 100        | 490         | 0.06         | 645        |
| M83446/09-11         | 9011      | M83446/09-58         | 9058      | 0.096           | 0.120 | 0.144 | 50    | 50         | 460         | 0.07         | 600        |
| M83446/09-12         | 9012      | M83446/09-59         | 9059      | 0.12            | 0.15  | 0.18  | 50    | 50         | 430         | 0.08         | 560        |
| M83446/09-13         | 9013      | M83446/09-60         | 9060      | 0.14            | 0.18  | 0.22  | 50    | 50         | 385         | 0.09         | 525        |
| M83446/09-14         | 9014      | M83446/09-61         | 9061      | 0.17            | 0.22  | 0.27  | 45    | 50         | 330         | 0.10         | 500        |
| M83446/09-15         | 9015      | M83446/09-62         | 9062      | 0.21            | 0.27  | 0.33  | 45    | 50         | 300         | 0.15         | 400        |
| M83446/09-16         | 9016      | M83446/09-63         | 9063      | 0.26            | 0.33  | 0.40  | 45    | 50         | 275         | 0.19         | 360        |
| M83446/09-17         | 9017      | M83446/09-64         | 9064      | 0.32            | 0.39  | 0.47  | 40    | 50         | 240         | 0.25         | 300        |
| M83446/09-18         | 9018      | M83446/09-65         | 9065      | 0.37            | 0.47  | 0.57  | 40    | 25         | 210         | 0.30         | 280        |
| M83446/09-19         | 9019      | M83446/09-66         | 9066      | 0.46            | 0.56  | 0.68  | 40    | 25         | 190         | 0.40         | 250        |
| M83446/09-20         | 9020      | M83446/09-67         | 9067      | 0.54            | 0.68  | 0.82  | 40    | 25         | 165         | 0.60         | 200        |
| M83446/09-21         | 9021      | M83446/09-68         | 9068      | 0.68            | 0.82  | 1.00  | 40    | 25         | 155         | 0.70         | 180        |
| M83446/09-22         | 9022      | M83446/09-69         | 9069      | 0.75            | 1.0   | 1.25  | 40    | 25         | 140         | 0.90         | 160        |
| M83446/09-23         | 9023      | M83446/09-70         | 9070      | 0.90            | 1.2   | 1.50  | 35    | 25         | 125         | 1.1          | 150        |
| M83446/09-24         | 9024      | M83446/09-71         | 9071      | 1.13            | 1.5   | 1.87  | 30    | 7.9        | 115         | 1.3          | 135        |
| M83446/09-25         | 9025      | M83446/09-72         | 9072      | 1.35            | 1.8   | 2.25  | 30    | 7.9        | 105         | 1.7          | 120        |
| M83446/09-26         | 9026      | M83446/09-73         | 9073      | 1.65            | 2.2   | 2.75  | 30    | 7.9        | 100         | 2.3          | 100        |
| M83446/09-27         | 9027      | M83446/09-74         | 9074      | 2.02            | 2.7   | 3.37  | 25    | 7.9        | 85          | 3.0          | 90         |
| M83446/09-28         | 9028      | M83446/09-75         | 9075      | 2.48            | 3.3   | 4.12  | 25    | 7.9        | 75          | 3.9          | 80         |
| M83446/09-29         | 9029      | M83446/09-76         | 9076      | 2.92            | 3.9   | 4.87  | 25    | 7.9        | 47          | 3.9          | 80         |
| M83446/09-30         | 9030      | M83446/09-77         | 9077      | 3.52            | 4.7   | 5.88  | 25    | 7.9        | 30          | 3.9          | 80         |
| M83446/09-31         | 9031      | M83446/09-78         | 9078      | 4.2             | 5.6   | 7.0   | 22    | 7.9        | 24          | 4.0          | 75         |
| M83446/09-32         | 9032      | M83446/09-79         | 9079      | 5.1             | 6.8   | 8.5   | 22    | 7.9        | 23          | 4.0          | 75         |
| M83446/09-33         | 9033      | M83446/09-80         | 9080      | 6.1             | 8.2   | 10.2  | 22    | 7.9        | 22          | 4.5          | 72         |
| M83446/09-34         | 9034      | M83446/09-81         | 9081      | 7.5             | 10.0  | 12.5  | 22    | 7.9        | 21          | 4.5          | 72         |
| M83446/09-35         | 9035      | M83446/09-82         | 9082      | 9.0             | 12.0  | 15.0  | 22    | 7.9        | 17          | 5.0          | 70         |
| M83446/09-36         | 9036      | M83446/09-83         | 9083      | 11.2            | 15.0  | 18.7  | 22    | 2.5        | 15          | 6.0          | 65         |
| M83446/09-37         | 9037      | M83446/09-84         | 9084      | 13.5            | 18.0  | 22.5  | 22    | 2.5        | 14          | 8.0          | 55         |
| M83446/09-38         | 9038      | M83446/09-85         | 9085      | 16.5            | 22.0  | 27.5  | 22    | 2.5        | 13          | 10.0         | 50         |
| M83446/09-39         | 9039      | M83446/09-86         | 9086      | 20.2            | 27.0  | 31.3  | 22    | 2.5        | 11          | 11.0         | 45         |
| M83446/09-40         | 9040      | M83446/09-87         | 9087      | 24.7            | 33.0  | 41.2  | 22    | 2.5        | 10          | 13.0         | 43         |
| M83446/09-41         | 9041      | M83446/09-88         | 9088      | 29.2            | 39.0  | 48.8  | 22    | 2.5        | 9           | 14.0         | 42         |
| M83446/09-42         | 9042      | M83446/09-89         | 9089      | 35.2            | 47.0  | 58.8  | 22    | 2.5        | 8           | 15.0         | 40         |
| M83446/09-43         | 9043      | M83446/09-90         | 9090      | 42.0            | 56.0  | 70.0  | 22    | 2.5        | 7           | 19.0         | 36         |
| M83446/09-44         | 9044      | M83446/09-91         | 9091      | 51.0            | 68.0  | 85.0  | 22    | 2.5        | 6           | 24.0         | 32         |
| M83446/09-45         | 9045      | M83446/09-92         | 9092      | 62.0            | 82.0  | 102.0 | 25    | 2.5        | 5           | 31.0         | 28         |
| M83446/09-46         | 9046      | M83446/09-93         | 9093      | 75.0            | 100.0 | 125.0 | 25    | 2.5        | 4           | 40.0         | 25         |
| M83446/09-47         | 9047      | M83446/09-94         | 9094      | 90.0            | 120.0 | 150.0 | 25    | 2.5        | 3           | 50.0         | 22         |

**Ordering note:** Add suffix "A" to C/ACM Part No. to specify Gold Plated terminations, "F" for Tin-Lead coated terminations.



**COAST / ADVANCED CHIP MAGNETICS**

4225 Spencer Street, Torrance CA 90503 • Phone: 310-370-8188 • Fax: 310-370-8388  
 Web: <http://www.coastacm.com> • Email: [sales@coastacm.com](mailto:sales@coastacm.com)