SPECIFICATION APPROVAL

Soft ferrite core

**Customer Part Number**

H31X19X8 DMR40

**DMEGC Part Number**

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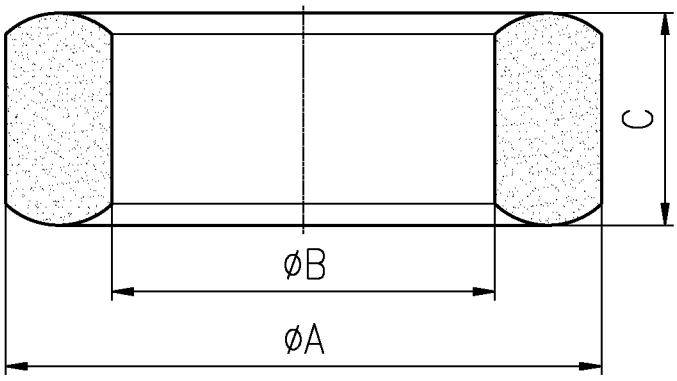
**CUSTOMER:**

**APPROVED:**

| DRAWN | | CHECK | | APPROVED | | DATE | 2021.09.29 |
|---|---|---|---|---|---|---|---|

## OUTLINE AND DIMENSIONS




| ΦA | ΦB | C |
|---|---|---|
| 30.8±0.5 | 19.2±0.5 | 8±0.4 |

1. Grass green epoxy coating

2. Following is the specification after grass green coated

| ΦA | ΦB | C |
|---|---|---|
| 31.8MAX | 18.3MIN | 8.9MAX |

VAC: 2000Vmin, 0.5mA, 10 。

Hipot mesh to mesh at 2000 VAC min.

| Core Factor C1($mm^{-1}$) | Effective Length Le(mm) | Effective Area Ae($mm^2$) | Effective Volume Ve($mm^3$) |
|---|---|---|---|
| 1.8 | 75.7 | 42 | 3179.4 |

# APPEARANCE REQUIREMENT

1 Chip

Area of Chip: $\leqslant 1.5mm^2$

Sum of Chiping Area: $\leqslant 2.5mm^2$

2 Crack: There shall not be any crack which can be deterted by naked eye (eyesight level:1.5).

3 Other:There shall be no stain.

ELECTROMAGNETIC AND MECHANICAL PROPERTY

| Measurement item | Specification | Measurement condition |
|---|---|---|
| AL<br>Inductance | 1737nH/N$^2$ ± 25% | Instrument<br>1. 0kHz,0.25V<br>Frequency and Voltage<br>: Φ0.35mm N=10T<br>Coil<br>: 1~3kg<br>Pressure<br>: 25℃ ± 3℃<br>Temperature |

# DMR40 Material Characteristics

| CHARACTERISTICS | CONDITIONS | | VALUE |
|---|---|---|---|
| $\mu_i$ Initial Permeability | 10kHz, B<0.25mT | 25℃ | 2300±25% |
| Bs (mT) Saturation Magnetic Flux Density | 50Hz, 1194A/m | 25℃ | 510 |
| | | 100℃ | 390 |
| Br (mT) Residual Magnetic Flux Density | | 25℃ | 95 |
| | | 100℃ | 55 |
| Hc (A/m) Coercive Force | | 25℃ | 14 |
| | | 100℃ | 9 |
| Pv (mW/cm$^3$) Power Loss | 100kHz, 200mT | 25℃ | 600 |
| | | 60℃ | 450 |
| | | 100℃ | 410 |
| | | 120℃ | 500 |
| Tc (℃) Curie Temperature | 10kHz, B<0.25mT | | >215 |
| ρ (Ω·m) Resistivity | | 25℃ | 6.5 |
| d (g/cm$^3$) Density | | 25℃ | 4.8 |

The above typical data are calculated from the standard toroid core. The performance of specific parts will vary slightly.

# INSPECTION RULE

1 Cores inspection is conducted per GB/T2828.1-2012 with visual appearance and dimension Ⅱ ,electromagnetic property S-3,AQL:0.65.

2 Customer is expected to complete the inspection within 10 days after receipt of the cores and inform supplier the results of cores inspection in writing or the cores would be treated as qualified.

## NOTE

1 After receiving DMEGC Spec, please sign and send it back to DMEGG within 7 days. Otherwise, it is meant that Spec has been approved by customer side.

2 With regard to part change, in needs both parties' confirmation and signature. Change is valid from receiving the signed Spec.