# EMC Components

SF Series

## Differential Mode Choke Coils for Signal Line and DC Power Line
## Axial

### VARNISHED AND TAPED TYPE FOR LARGE CURRENT

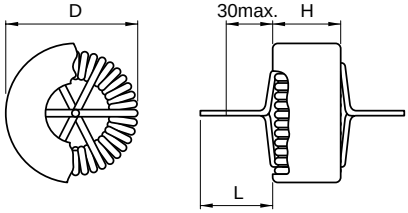
### FEATURES

- The SF series chokes feature cores with high saturation magnetic flux density. They thereby provide an effective means of combating pluse EMC.
- By using an advanced amorphous metal alloy core, the SF series are able to provide line noise attenuation performance equivalent to conventional ferrite-based chokes but with far more compact dimensions and fewer coil turns. They can thus be implemented in high-density circuit configurations to comply with various EMC-related regulations.

### TYPICAL CHARACTERISTICS OF SF CORE

| | |
|---|---|
| μi[300kHz] | 75 |
| tanδ/μi[300kHz] | $3\times10^{-3}$ |
| Applicable frequency | 10MHz max. |
| Temperature stability[–20 to +60°C] | 5.2% |
| Bs[24kA/m] | 1400mT |

### SHAPES AND DIMENSIONS/ELECTRICAL CHARACTERISTICS




Dimensions in mm

| Part No. | Rated current (A)max. | Inductance*1 (μH)min. | DC resistance (mΩ)max. | Shape | Diameter of winding wire*2 ø(mm) | Dimensions(mm) D max. | H max. | L | Weight (g) |
|---|---|---|---|---|---|---|---|---|---|
| SF-HP-20A-01 | 20 | 60 | 15 | SF-T36(1piece) | 1.8×2 | 70 | 28 | 50±5 | 230 |
| SF-HP-30A-01 | 30 | 60 | 10 | SF-T36(2piece) | 1.8×3 | 72 | 43 | 50±5 | 420 |
| SF-HP-40A-01 | 40 | 60 | 10 | SF-T36(3piece) | 1.8×3 | 72 | 60 | 50±5 | 670 |
| SF-HP-60A-01 | 60 | 60 | 10 | SF-T36(3piece) | 2×3 | 72 | 60 | 50±5 | 760 |

*1 LCR METER: YHP4261A, 1kHz(L≦190μH:70mA, L>190μH:10mA)
*2 PEW (Grade 1)

- Please contact us, when specifying dimensions of the center hole for the coil.
- When coil temperature exceeds 100°C, please use forced cooling as well (SF-HP-20A-01, SF-HP-30A-01, SF-HP-40A-01, SF-HP-60A-01).