

# Varistors(SMD)

## For High-speed Differential Signal Line

Conformity to RoHS Directive

### AVF16 Series

A low-voltage varistor applicable in high frequencies has been manufactured by using TDK circuit and material technology.

#### FEATURES

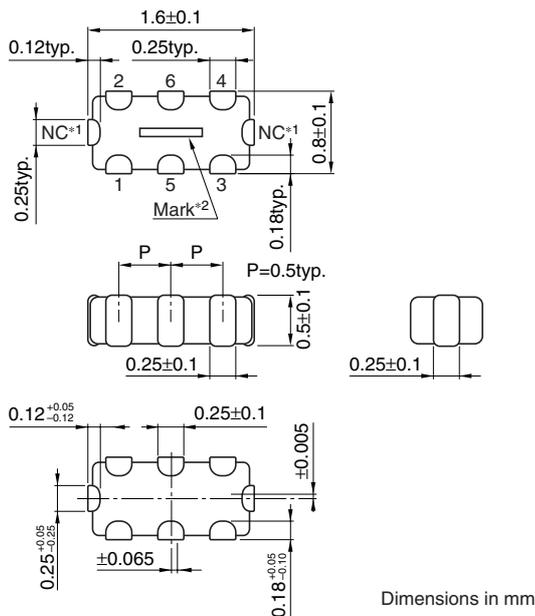
- Chip size: 1608 (L1.6×W0.8mm), applicable in 2 Line-in 1 (2in1) differential line.
- 2GHz or more of cutoff frequency in differential mode (Sdd21).
- Superior electrostatic absorption characteristics due to reduction of varistor voltage.
- Meeting Electrostatic Discharge Test IEC61000-4-2, HBM (human body model) contact 8kV.

#### APPLICATIONS

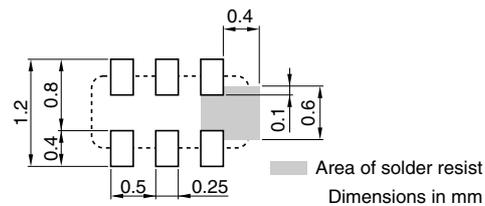
- Protective circuit for high-speed differential signal from static electricity
- HDMI, USB, IEEE1394, etc.



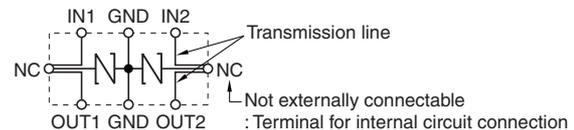
#### SHAPES AND DIMENSIONS



#### RECOMMENDED PC BOARD PATTERNS



#### CIRCUIT DIAGRAM



\*1 Do not solder the terminal NC(not connected) with land etc.

\*2 Mark is unrelated to the polarity (directionality) of the terminal.

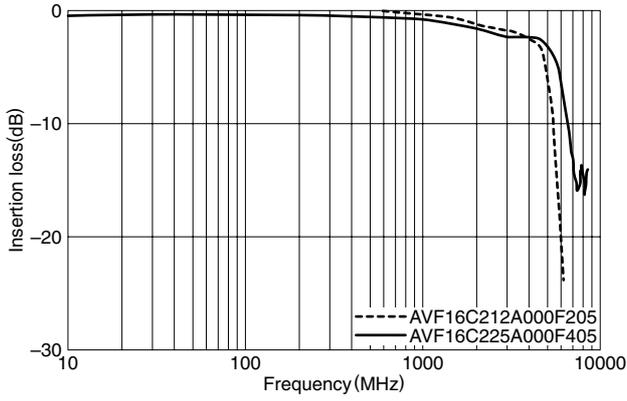
#### ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage $V_{1mA}$ (V)	Maximum continuous voltage Edc(V)	Cut-off frequency [Sdd21] (GHz)
AVF16C212A000F205	12	5.5	2 min.
AVF16C225A000F405	25	5.5	4 min.

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

**TYPICAL ELECTRICAL CHARACTERISTICS**  
**DIFFERENTIAL MODE FREQUENCY CHARACTERISTICS**  
[Sdd21]



**TDR(Leading edge of pulse: 200ps)**  
**AVF16C225A000F405**

