# THE DATASHEET OF

# ACF451832-222-TD01

# 3-teminal Filters

## For signal line

## ACF series

| | | |
|---|---|---|
| **Type:** | **ACF3225** | **[1210 inch]*** |
| | **ACF4532** | **[1812 inch]** |

*** Dimensions Code [EIA]**

Issue date: September 2011

- All specifications are subject to change without notice.
- 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.

# 3-terminal Filters
# For Signal Line

**Conformity to RoHS Directive**

## ACF Series ACF321825, ACF451832

### FEATURES

- The ACF series consists of products with superior attenuation characteristics, in which the T-type filter circuit is magnetically shielded with ferrite.
- The series offers even greater attenuation characteristics when used in a stable circuit on the ground.
- The ACF series is ideal for high-density circuit design, since the series is vertically mounted and does not require much mounting space.
- Available for reflow soldering.
- It is a product conforming to RoHS directive.

### PRODUCT IDENTIFICATION

| ACF | 321825 | - | 223 | - | T | D□□ |
|---|---|---|---|---|---|---|
| (1) | (2) | | (3) | | (4) | (5) |

(1) Series name
(2) Dimensions
(3) Type
(4) Packaging style
(5) TDK internal code

### TEMPERATURE RANGES

| | |
|---|---|
| Operating/Storage | –25 to +85°C |

### PACKAGING STYLE AND QUANTITIES

| Packaging style | Quantity |
|---|---|
| Taping | 1000 pieces/reel |

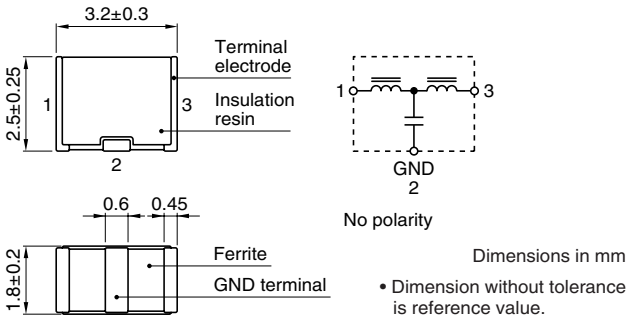
### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- The inductance value may change due to magnetic saturation if the current exceeds the rated maximum.
- Do not expose the inductors to stray magnetic fields.
- Avoid static electricity discharge during handling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.

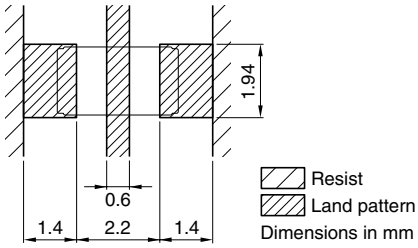
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
- Please contact our Sales office when your application is considered the following:
  The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

## ACF321825 TYPE

### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



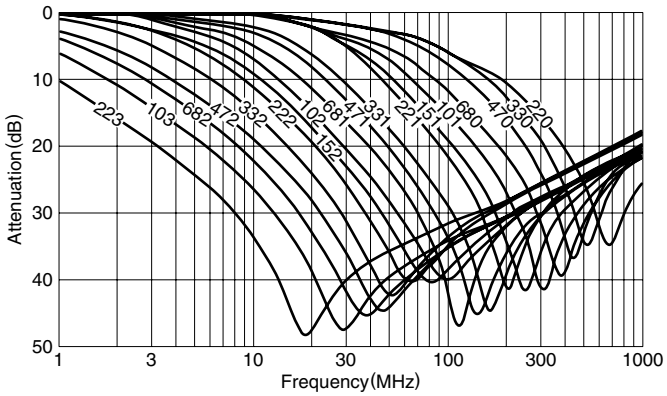

### RECOMMENDED PC BOARD PATTERN
### REFLOW SOLDERING



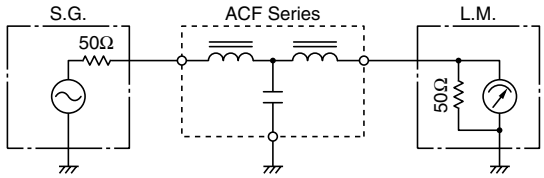

### ELECTRICAL CHARACTERISTICS

| Part No. | 25dB attenuation frequency range (MHz) | Rated voltage Edc (V)max. | Rated current (mA)max. | DC resistance (Ω)max. [Terminal No.1 to 3] | Insulation resistance (MΩ)min. [Terminal No.1 to 2/No.2 to 3] |
|---|---|---|---|---|---|
| ACF321825-223 | 11 to 55 | 20 | 300 | 0.15 | 1000 |
| ACF321825-103 | 17 to 60 | 20 | 300 | 0.15 | 1000 |
| ACF321825-682 | 22 to 75 | 20 | 300 | 0.15 | 1000 |
| ACF321825-472 | 30 to 85 | 20 | 300 | 0.15 | 1000 |
| ACF321825-332 | 37 to 90 | 20 | 300 | 0.15 | 1000 |
| ACF321825-222 | 45 to 105 | 20 | 300 | 0.15 | 1000 |
| ACF321825-152 | 60 to 115 | 20 | 300 | 0.15 | 1000 |
| ACF321825-102 | 80 to 140 | 20 | 300 | 0.15 | 1000 |
| ACF321825-681 | 95 to 150 | 20 | 300 | 0.15 | 1000 |
| ACF321825-471 | 120 to 180 | 20 | 300 | 0.15 | 1000 |
| ACF321825-331 | 130 to 210 | 20 | 300 | 0.15 | 1000 |
| ACF321825-221 | 170 to 250 | 20 | 300 | 0.15 | 1000 |
| ACF321825-151 | 205 to 280 | 20 | 300 | 0.15 | 1000 |
| ACF321825-101 | 265 to 340 | 20 | 300 | 0.15 | 1000 |
| ACF321825-680 | 340 to 420 | 20 | 300 | 0.15 | 1000 |
| ACF321825-470 | 420 to 500 | 20 | 300 | 0.15 | 1000 |
| ACF321825-330 | 500 to 600 | 20 | 300 | 0.15 | 1000 |
| ACF321825-220 | 600 to 700 | 20 | 300 | 0.15 | 1000 |

### TYPICAL ELECTRICAL CHARACTERISTICS
### ATTENUATION vs. FREQUENCY CHARACTERISTICS

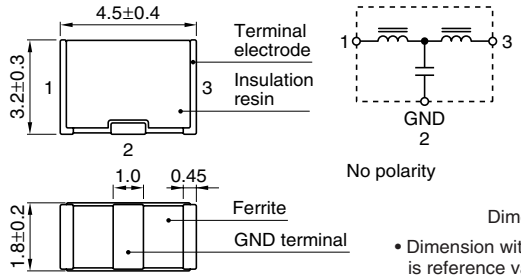



### MEASURING CIRCUIT



## ACF451832 TYPE

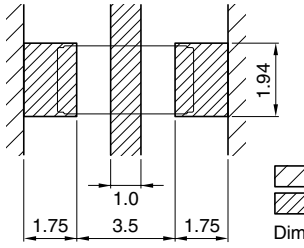
### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM




Dimensions in mm

• Dimension without tolerance is reference value.

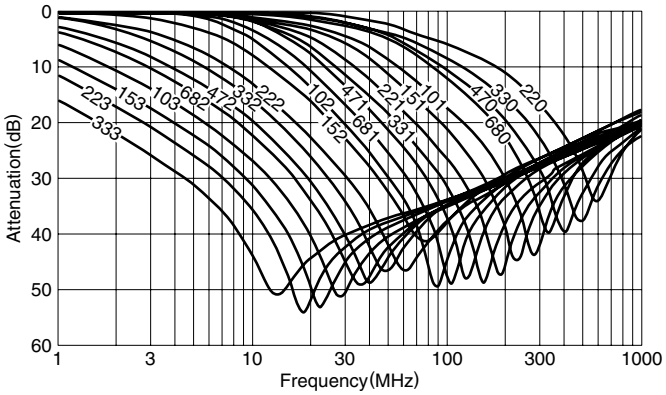
### RECOMMENDED PC BOARD PATTERN
### REFLOW SOLDERING



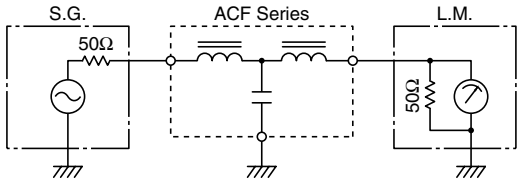

### ELECTRICAL CHARACTERISTICS

| Part No. | 25dB attenuation frequency range (MHz) | Rated voltage Edc (V)max. | Rated current (mA)max. | DC resistance (Ω)max. [Terminal No.1 to 3] | Insulation resistance (MΩ)min. [Terminal No.1 to 2/No.2 to 3] |
|---|---|---|---|---|---|
| ACF451832-333 | 7 to 60 | 50 | 300 | 0.15 | 1000 |
| ACF451832-223 | 9 to 65 | 50 | 300 | 0.15 | 1000 |
| ACF451832-153 | 11 to 70 | 50 | 300 | 0.15 | 1000 |
| ACF451832-103 | 15 to 75 | 50 | 300 | 0.15 | 1000 |
| ACF451832-682 | 20 to 85 | 50 | 300 | 0.15 | 1000 |
| ACF451832-472 | 25 to 90 | 50 | 300 | 0.15 | 1000 |
| ACF451832-332 | 35 to 100 | 50 | 300 | 0.15 | 1000 |
| ACF451832-222 | 40 to 110 | 50 | 300 | 0.15 | 1000 |
| ACF451832-152 | 50 to 130 | 50 | 300 | 0.15 | 1000 |
| ACF451832-102 | 65 to 150 | 50 | 300 | 0.15 | 1000 |
| ACF451832-681 | 75 to 160 | 50 | 300 | 0.15 | 1000 |
| ACF451832-471 | 95 to 180 | 50 | 300 | 0.15 | 1000 |
| ACF451832-331 | 115 to 205 | 50 | 300 | 0.15 | 1000 |
| ACF451832-221 | 150 to 250 | 50 | 300 | 0.15 | 1000 |
| ACF451832-151 | 190 to 290 | 50 | 300 | 0.15 | 1000 |
| ACF451832-101 | 235 to 335 | 50 | 300 | 0.15 | 1000 |
| ACF451832-680 | 295 to 395 | 50 | 300 | 0.15 | 1000 |
| ACF451832-470 | 360 to 460 | 50 | 300 | 0.15 | 1000 |
| ACF451832-330 | 450 to 550 | 50 | 300 | 0.15 | 1000 |
| ACF451832-220 | 550 to 650 | 50 | 300 | 0.15 | 1000 |

### TYPICAL ELECTRICAL CHARACTERISTICS
### ATTENUATION vs. FREQUENCY CHARACTERISTICS

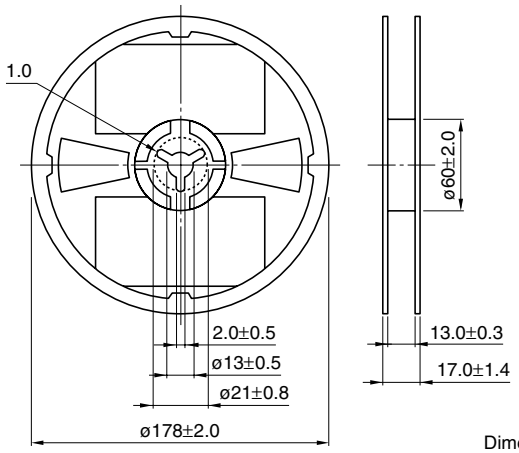



### MEASURING CIRCUIT



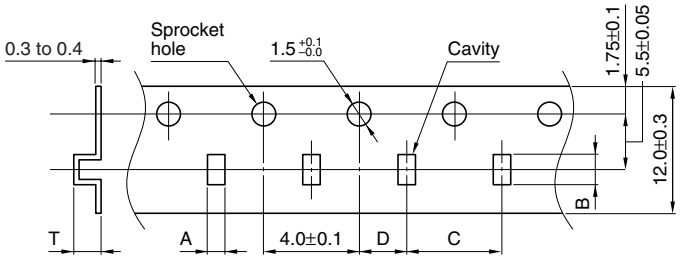
## PACKAGING STYLES

### REEL DIMENSIONS



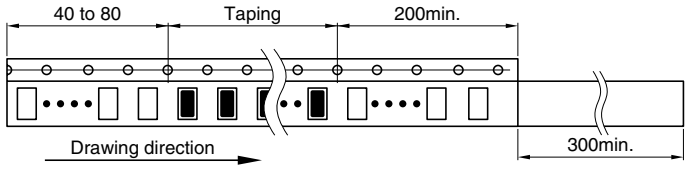

Dimensions in mm

### TAPE DIMENSIONS




Dimensions in mm

| Type | A | B | C | D | T |
|---|---|---|---|---|---|
| 321825 | 2.2±0.2 | 3.7±0.2 | 4.0±0.1 | 2.0±0.05 | 3.3max. |
| 451832 | 2.2±0.2 | 5.2±0.2 | 4.0±0.1 | 2.0±0.05 | 3.8max. |




Dimensions in mm

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