&TDK

3-terminal Filters(SMD) For Wide-band

Conformity to RoHS Directive

MEM Series MEM2012TC Type

FEATURES

- Multilayer chip EMC filter utilizing a T-type circuit.
- · Entirely monolithic structure results in high reliability.
- Due to closed magnetic circuit architecture, high-density installation becomes possible, and crosstalk generation is prevented.
- Steep attenuation characteristic plot. Highly effective noise suppression.
- Covers a wide range of frequencies.
- MEM2012TC combines a bead inductor with a through-type capacitor.

APPLICATIONS

Computer and computer peripherals, VCRs, TVs, car audio equipment, printers, game machines, etc.

PRODUCT IDENTIFICATION

 $\frac{\text{MEM}}{(1)} \frac{2012}{(2)} \frac{\text{T}}{(3)} \frac{\text{C100}}{(4)} \frac{\text{T}}{(5)}$

- (1)Series name
- (2) Dimensions L×W
- (3)T-type circuit
- (4)Capacitance C100:10pF at 1MHz
- (5) Packaging style T: Taping

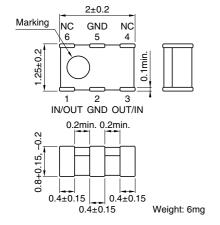
PACKAGING STYLE AND QUANTITIES

| Packaging style | Quantity |
|-----------------|------------------|
| Taping | 4000 pieces/reel |

TEMPERATURE RANGES

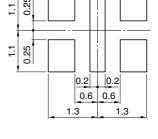
Operating/Storage -40 to +85°C

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN









Dimensions in mm

ELECTRICAL CHARACTERISTICS

| Part No. | Capacitance* (pF) | Tolerance (%) | Rated voltage Edc(V)max. | Rated current Idc(A)max. | DC resistance (Ω) max. [Terminal No.1 to 3] |
|--------------|----------------------|------------------|--------------------------|--------------------------|---|
| MEM2012TC100 | 10 | ±30 | 12 | 1 | 0.12 |
| MEM2012TC220 | 22 | ±30 | 12 | 1 | 0.12 |
| MEM2012TC470 | 47 | ±30 | 12 | 1 | 0.12 |
| MEM2012TC101 | 100 | ±30 | 12 | 1 | 0.12 |
| MEM2012TC151 | 150 | ±30 | 12 | 1 | 0.12 |

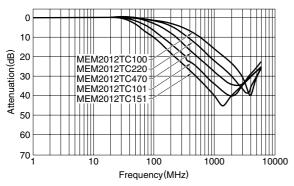
^{*}Measuring frequency: 1(MHz), measuring voltage: 1(V)

- 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 are considered the following:

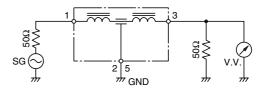
 The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

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TYPICAL ELECTRICAL CHARACTERISTICS ATTENUATION vs. FREQUENCY CHARACTERISTICS



MEASURING CIRCUIT



RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING

