

3-terminal Filters, SMD Array

For signal line

(UHF band terrestrial digital broadcast / DVB-H band compatible)

MEA-PE Series

MEA1608PE Type

MEA1608PE

1608[0603 inch]*

* Dimensions Code JIS[EIA]

REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

⚠ REMINDERS
The storage period is less than 12 months. Be sure to follow the storage conditions (Temperature: 5 to 40°C, Humidity: 10 to 75% RH or less).
If the storage period elapses, the soldering of the terminal electrodes may deteriorate. Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.
Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
Carefully lay out the coil for the circuit board design of the non-magnetic shield type. A malfunction may occur due to magnetic interference.
Use a wrist band to discharge static electricity in your body through the grounding wire.
On not expose the products to magnets or magnetic fields.
On not use for a purpose outside of the contents regulated in the delivery specifications.
The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition. The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.
If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions

- (1) Aerospace/Aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment
- (4) Power-generation control equipment

set forth in the each catalog, please contact us.

- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

EMC Components



3-terminal Filters, SMD Array

For signal line

Product compatible with RoHS directive
Halogen-free
Compatible with lead-free solders

(UHF band terrestrial digital broadcast / DVB-H band compatible)

Overview of MEA1608PE Type

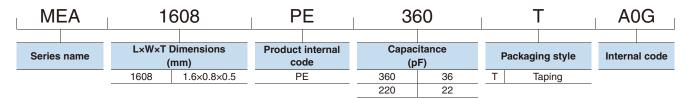
FEATURES

- Single chip for 4-line filters, and compatible with high-density mounting.
- Ocompact with a low profile design.
- Effective as a desensitization countermeasure in information transmission terminals such as smart phones.
- O Can be used for signal lines of mobile device displays.

APPLICATION

Noise removal from signal lines of smart phones, digital cameras, PCs, game machines, flat TVs, etc.

PART NUMBER CONSTRUCTION



■ OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY, PRODUCT WEIGHT

	Temperature range		Package quantity	Individual weight
Туре	Operating temperature	Storage temperature*		
	(°C)	(°C)	(pieces/reel)	(mg)
MEA1608PE	-40 to +85	-40 to +85	4,000	3.5

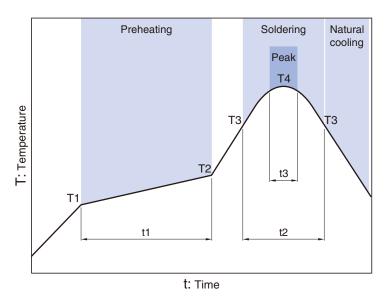
^{*} The Storage temperature range is for after the circuit board is mounted.

RoHS Directive Compliant Product: See the following for more details related to RoHS Directive compliant products. http://product.tdk.com/en/environment/rohs/

O Halogen-free: Indicates that CI content is less than 900ppm, Br content is less than 900ppm, and that the total CI and Br content is less than 1500ppm.



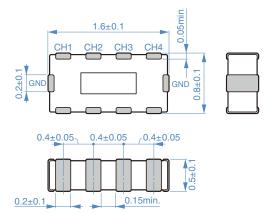
■ RECOMMENDED REFLOW PROFILE



Preheating		Soldering	g	Peak		
Temp.		Time	Temp.	Time	Temp.	Time
T1	T2	t1	Т3	t2	T4	t3
150°C	180°C	60 to 120s	230°C	30 to 60s	250 to 260°C	10s max.

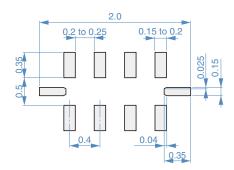


■SHAPE & DIMENSIONS



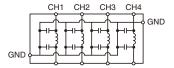
Dimensions in mm

■ RECOMMENDED LAND PATTERN



Dimensions in mm

CIRCUIT DIAGRAM





ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

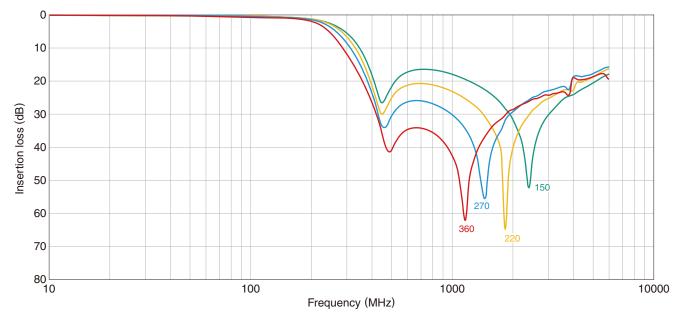
Capacitance	Cutoff frequency	Insertion loss 20dB frequency range	Rated voltage	Rated current	Part No.
(pF)	(MHz)typ.	(MHz)	(V)max.	(mA)max.	
36	220	470 to 3000	6.3	100	MEA1608PE360TA0G
27	240	470 to 3000	6.3	100	MEA1608PE270TA0G
22	250	470 to 3000	6.3	100	MEA1608PE220TA0G
15	270	_	6.3	100	MEA1608PE150TA0G

O Measurement equipment

Measurement item	Product No.	Manufacturer
Capacitance	4294A	Agilent Technologies
Frequency characteristics	N5230C	Agilent Technologies

^{*} Equivalent measurement equipment may be used.

☐ INSERTION LOSS VS. FREQUENCY CHARACTERISTICS



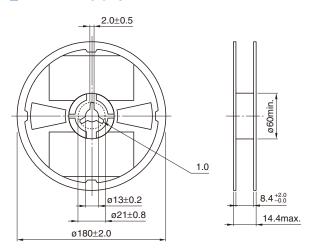
$\bigcirc \ {\it Measurement equipment}$

Product No.	Manufacturer
N5230C	Agilent Technologies

^{*} Equivalent measurement equipment may be used.

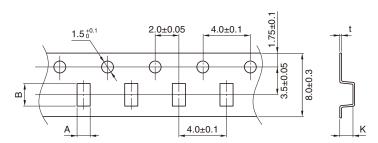
■PACKAGING STYLE

□REEL DIMENSIONS



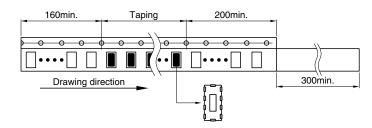
Dimensions in mm

TAPE DIMENSIONS



Dimensions in mm

Type	Α	В	K	t
MEA1608PE	1.00±0.10	1.80±0.10	1.0max.	0.25±0.05



Dimensions in mm

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MEA2010PE150T001 MEA1608PE220TA0G MEA1608LC150T001 742730023 MEM2012F101R NFA21SL287V1A45L

MEM1608P101RT001 SBSMP1000224MXT SBSMC5000683MXT SBSMC0500474MXB SBSGP1000104MXB SBSGP1000104MXT

SBSGC5000102MXB MEM2012V301R MEM1608P75R0T001 NFA18SD187X1A45L VEMI355A-HAF-G-08 4420P-601-250/181

EMI220T-RC EMI221T-RC EMI271T-RC EMI470T-RC EMI101T-RC EMI222T-RC SBSMP0500474MXB SBSMP2000104MXT

SBSGC0500224MXT BNP002-02 BNP002-03 BNX002-11 BNX003-11 BNX005-11 BNX012-01 NFA18SL407V1A45L

NFA21SL317V1A45L NFW31SP206X1E4L NFW31SP506X1E4L