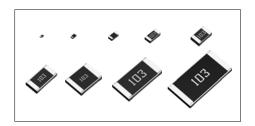
Thick Film Chip Resistors

MCR Series Datasheet

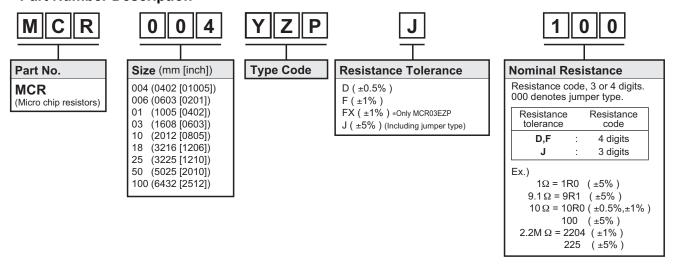
Features

- 1) Full line up from ultra small size (01005) to 2512 with jumper type.
- 2) High reliability metal glazed thick film.
- 3) ROHM resistors have obtained ISO9001/ISO/TS16949 certification.



| | Si | ze | | 5 | | Automotive Grade |
|----------|------|--------|-----------|------------------------------|-----------------|-------------------------|
| Part No. | (mm) | (inch) | Type Code | Packing Specification | Quantity / Reel | Available (AEC-Q200) |
| MCR004 | 0402 | 01005 | YZP | | 15,000 | - |
| MCR006 | 0603 | 0201 | YLP | Paper tape (2mm pitch) | 15,000 | |
| MCR01 | 1005 | 0402 | MZP | | 10,000 | |
| MCR03 | 1608 | 0603 | | | | |
| MCR10 | 2012 | 0805 | EZP | Paper tape (4mm pitch) | 5,000 | |
| MCR18 | 3216 | 1206 | | | | Yes |
| MCR25 | 3225 | 1210 | | | | |
| MCR50 | 5025 | 2010 | JZH | Embossed tape (4mm pitch) | 4,000 | |
| MCR100 | 6432 | 2512 | | | | |

Part Number Description



MCR series Datasheet

Products List

| Part No. | Type Code | Rated Power (70°C) | Limiting Element Voltage | Temperature Coefficient | Resistance Tolerance | Resistance Range | Series | Operating Temperature Range | | |
|----------|---------------|---|-----------------------------|-----------------------------------|-------------------------|---|----------------------------|-----------------------------------|---|--|
| | | (W) | (V) | (ppm / °C) | (%) | | | (°C) | | |
| MODOOA | \/ 7 D | 0.031 | 15 | +600 / -200 ±300 ±250 | J(±5%) | 1.0Ω to 9.1Ω 10Ω to 91Ω 100Ω to 3MΩ | E24 | | | |
| MCR004 | TZP | ZP 0.001 | | ±300 ±250 | F(±1%) | 10Ω to 91Ω 100Ω to 3MΩ | E24,E96 | -55 to +125 | | |
| | | Jumper type : Rmax = 50m Ω / Imax. = 0.5A | | | | | | | | |
| | | | | +600 / -200 ±250 | J(±5%) | 1.0Ω to 9.1Ω 10Ω to 10MΩ | E24 | | | |
| MCR006 | YLP | 0.05 | 25 | ±250 ±200 | F(±1%) D(±0.5%) | 10Ω to 10MΩ 10Ω to 910Ω | E24,E96 | | | |
| | | | | ±100 | 50 0 / 1 | 1kΩ to $1MΩ$ | | | | |
| | | | • | Jumper type : Rma: +500 / –250 | x = 50m Ω / 1max | 1.0Ω to 9.1Ω | | 1 | | |
| | | 0.063 | 50 | ±200 ±100 | J(±5%) F(±1%) | 10Ω to 10MΩ 10Ω to 2.2MΩ | E24 | | | |
| MCR01 | MZP | 0.003 | 30 | ±100 | ` ' | 10Ω to 91Ω | E24,E96 | | | |
| | | | | ±50 | D(±0.5%) | 100Ω to 1MΩ | , | | | |
| | | | | Jumper type : Rma | $ax = 50m \Omega / Ima$ | x. = 1A | | | | |
| | | | | ±400 | J(±5%) | 1.0Ω to 9.1Ω | E24 | | | |
| | | | 0.1 | 50 | ±200 ±100 | FX(±1%) | 10Ω to 10MΩ 10Ω to 10MΩ | | _ | |
| MCR03 | EZP | 0.1 | 30 | ±100 | , , | 10Ω to 91Ω | E24,E96 | | | |
| | | | | ±50 | D(±0.5%) | 100Ω to 1MΩ | | | | |
| | | Jumper type : Rmax = 50m Ω / Imax. = 1A | | | | | | | | |
| | | 0.125 | | ±400 ±200 | J(±5%) | 1.0Ω to 9.1Ω 10Ω to 10MΩ | E24 | | | |
| | | 0.123 | 150 | ±100 | F(±1%) | 10Ω to $2.2M\Omega$ | | _ | | |
| MCR10 | EZP | 0.1 | .00 | ±100 | | 10Ω to 91Ω | E24,E96 | -55 to +155 | | |
| | | 0.1 | | ±50 | D(±0.5%) | 100 Ω to 1M Ω | | - | | |
| | | | | Jumper type : Rma | ax = 50m Ω / Ima | x. = 2A | | | | |
| | | 0.25 | | ±400 ±200 | J(±5%) | 1.0Ω to 9.1Ω 10Ω to 10MΩ | E24 | | | |
| | | 0.25 | 200 | ±200 ±100 | F(±1%) | 10Ω to 2.2MΩ | | | | |
| MCR18 | | 0.405 | 200 | ±100 | , | 10Ω to 91Ω | E24,E96 | | | |
| | | 0.125 | | ±50 | D(±0.5%) | 100 Ω to 1M Ω | | - | | |
| | | | | Jumper type : Rma | ax = 50m Ω / Ima | x. = 2A | | | | |
| | | | | 500±350 | | 1.0Ω to 2.0Ω | | | | |
| | | 0.25 | 200 | ±500 | J(±5%) | 2.2Ω to 5.1Ω | E24 | | | |
| MCR25 | JZH | 0.23 | 200 | ±200 | | 5.6Ω to 3.3MΩ | | | | |
| | | | | ±100 | F(±1%) | 10Ω to 1MΩ | E24,E96 | | | |
| | | | | Jumper type : Rma | $ax = 50m \Omega / Ima$ | x. = 2A | | | | |
| | | | | 500±350 | | 1.0Ω to 2.0Ω | | | | |
| | | 0.5 | 200 | ±500 ±200 | J(±5%) | 2.2Ω to 9.1Ω 10Ω to 330kΩ | E24 | | | |
| MCR50 | JZH | 0.5 | 200 | ±350 | | 360kΩ to 560kΩ | | | | |
| | | | | ±100 | F(±1%) | 10Ω to 180kΩ | E24,E96 | | | |
| | | | - | Jumper type : Rma | | x. = 3A | | | | |
| | | | | 500±350 | | 1.0Ω to 2.0Ω | | | | |
| | | | | ±500 | J(±5%) | 2.2Ω to 9.1Ω | E24 | -55 to +125 | | |
| MCR100 | JZH | 1 | 200 | ±350 | | 10Ω to 22Ω | | | | |
| | | | | ±200 ±100 | F(±1%) | 24Ω to 100kΩ 10Ω to 82kΩ | E24,E96 | | | |
| | | | | Jumper type : Rma | | 1 | L27,L30 | - | | |

^{*}Design and specifications are subject to change without notice. Carefully check the specification sheet supplied with the product before using or ordering it.



^{*}Rated voltage is determained from the following.

When rated voltage exceeds the limiting element voltage, the limiting element voltage shall be the rated voltage.

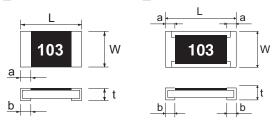
^{*}Rated voltage = $\sqrt{\text{Rated power} \times \text{Rasistance}}$

^{*}E24 : Standard products, E96 : Custom products

Chip Resistor Dimensions and Markings

■ MCR004 / 006 / 01 / 03

MCR10 / 18 / 25 / 50 / 100



<Marking method>

There are three or four digits used for the calculation number according to IEC code and "R"is used for the decimal point.

(Unit: mm)

| Part No. | Type Code | (mm) | (inch) | L | W | t | а | b | Marking existence |
|----------|-----------|------|--------|----------|----------|-----------|----------|---------------------------------------|-------------------|
| MCR004 | YZP | 0402 | 01005 | 0.4±0.02 | 0.2±0.02 | 0.13±0.02 | 0.1±0.03 | 0.1±0.03 | No |
| MCR006 | YLP | 0603 | 0201 | 0.6±0.03 | 0.3±0.03 | 0.23±0.03 | 0.1±0.05 | 0.15±0.05 | No |
| MCR01 | MZP | 1005 | 0402 | 1.0±0.05 | 0.5±0.05 | 0.35±0.05 | 0.2±0.1 | 0.25 ^{+0.05} _{-0.1} | No |
| MCR03 | EZP | 1608 | 0603 | 1.6±0.1 | 0.8±0.1 | 0.45±0.1 | 0.3±0.2 | 0.3±0.2 | Yes * |
| MCR10 | EZP | 2012 | 0805 | 2.0±0.1 | 1.25±0.1 | 0.55±0.1 | 0.4±0.2 | 0.4±0.2 | Yes |
| MCR18 | EZP | 3216 | 1206 | 3.2±0.15 | 1.6±0.15 | 0.55±0.1 | 0.5±0.25 | 0.5±0.25 | Yes |
| MCR25 | JZH | 3225 | 1210 | 3.2±0.15 | 2.5±0.15 | 0.55±0.15 | 0.5±0.25 | 0.5±0.25 | Yes |
| MCR50 | JZH | 5025 | 2010 | 5.0±0.15 | 2.5±0.15 | 0.55±0.15 | 0.6±0.25 | 0.6±0.25 | Yes |
| MCR100 | JZH | 6432 | 2512 | 6.3±0.15 | 3.2±0.15 | 0.55±0.15 | 0.6±0.25 | 0.6±0.25 | Yes |

Marking method of jumper type

| Jumper type | Marking existence |
|-----------------------------------|-------------------|
| MCR004 / 006 / 01 / 25 / 50 / 100 | No |
| MCR03 / 10 / 18 | Yes |

*Marking method of MCR25/50/100

Blueglass over coat is used for the jumper type.

There is no marking on the jumper type.

*Marking method of MCR03

For MCR03 series resistors, the printing process restricts the marking to three digits/characters.

Consequently, 1% tolerance resistors with values from the E24 series will be marked the same as

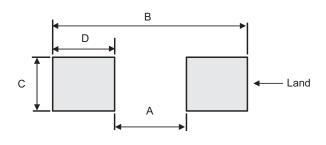
5% resistors with the same value, but 1% tolerance resistors with values from the E96 series will not be marked.

Examples:

MCR03EZPJ243 (5% tolerance, E24 / 24 k Ω) Marking = 243 MCR03EZPFX2402 (1% tolerance, E24 / 24 k Ω) Marking = 243 MCR03EZPFX2432 (1% tolerance, E96 / 24.3 k Ω) No Marking

MCR18EZPJ243 (5% tolerance, E24 / 24 k Ω) Marking = 243 MCR18EZPF2402 (1% tolerance, E24 / 24 k Ω) Marking = 2402 MCR18EZPF2432 (1% tolerance, E96 / 24.3 k Ω) Marking = 2432

Land pattern Example



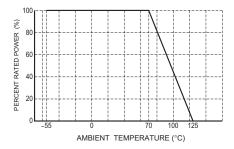
| | | | | | (Unit : mm) |
|---------------------|-----------|-----|------|------|-------------|
| Dimensions Part No. | Type Code | Α | В | С | D |
| MCR004 | YZP | 0.2 | 0.4 | 0.16 | 0.1 |
| MCR006 | YLP | 0.3 | 0.84 | 0.3 | 0.27 |
| MCR01 | MZP | 0.5 | 1.3 | 0.5 | 0.4 |
| MCR03 | EZP | 1.0 | 2.0 | 0.8 | 0.5 |
| MCR10 | EZP | 1.2 | 2.6 | 1.15 | 0.7 |
| MCR18 | EZP | 2.2 | 4.0 | 1.5 | 0.9 |
| MCR25 | JZH | 2.2 | 4.0 | 2.3 | 0.9 |
| MCR50 | JZH | 3.8 | 6.0 | 2.3 | 1.1 |
| MCR100 | JZH | 5.1 | 8.1 | 3.0 | 1.5 |



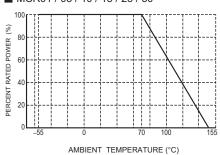
Derating Curve

When the ambient temperature exceeds 70°C, power dissipation must be adjusted according to the derating curves below.

■ MCR004 / 006 / 100



■ MCR01 / 03 / 10 / 18 / 25 / 50



Characteristics

| Test Items | Guarante | eed Value | Test Conditions | | |
|---|--|------------------|--|--|--|
| Test items | Resistor Type | Jumper Type | Test conditions | | |
| Resistance | See "Prod | ducts List" | 20°C | | |
| Variation of resistance with temperature | See "Prod | ducts List" | Measurement : +20 / -55 / +20 / +125°C | | |
| Overload | ± (2.0%+0.1Ω) | Max. 50mΩ | Test voltage is the smaller one of ① or ② ① Rated voltage (current) ×2.5, 2s. ② Maximum overload voltage ※ | | |
| Solderability | A new uniform coa 95% of the surface and no soldering of | | Rosin·Ethanol : 25% (Weight) Soldering condition : 235±5°C Duration of immersion : 2.0±0.5s | | |
| Resistance to soldering heat | ± (1.0%+0.05Ω) No remarkable abnormations | Max. $50m\Omega$ | Soldering condition : 260±5°C Duration of immersion : 10±1s | | |
| Rapid change of temperature | ± (1.0%+0.05Ω) | Max. 50mΩ | Test temp55°C to +125°C 100cycle (MCR006 / 01 / 03) -55°C to +125°C 5cycle (MCR10 / 18 / 25 / 50 / 100) | | |
| Damp heat, steady state | ± (3.0%+0.1Ω) | Max. 100mΩ | 40°C, 93%RH (Relative Humidity) Test time: 1,000h to 1,048h | | |
| Endurance at 70°C | ndurance at 70° C $\pm (3.0\% + 0.1\Omega)$ Max. 100 m Ω | | 70°C Rated voltage (current) 1.5h: ON – 0.5h: OFF Test time: 1,000h to 1,048h | | |
| Endurance | ± (3.0%+0.1Ω) | Max. 100mΩ | 125°C (MCR006 / 25 / 50 / 100) 155°C (MCR01 / 03 / 10 / 18) Test time : 1,000h to 1,048h | | |
| Resistance to solvent | ± (1.0%+0.05Ω) | Max. 50mΩ | 23±5°C, Immersion cleaning, 5±0.5min Solvent : 2–propanol | | |
| Bend strength of the end face plating $\pm (1.0\% + 0.05\Omega)$ Max. $50m\Omega$ Without mechanical damage such as breaks. | | - | | | |

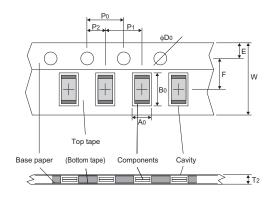
Maximum overload voltage (Test voltage)

| MCR004 | MCR006 | MCR01 | MCR03 | MCR10 | MCR18 | MCR025 | MCR50 | MCR100 | |
|--------|--------|-------|-------|-------|-------|--------|-------|--------|--|
| 30V | 50V | 100V | 100V | 200V | 400V | 400V | 400V | 400V | |

Compliance Standard(s) : IEC60115-8 JISC 5201-8

●Tape Dimensions

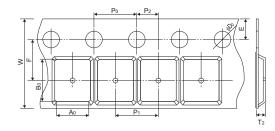
■ Paper Tape



| | | | | | | (Unit : mm) |
|----------|-----------|---------|----------|----------|---------------------------------------|---------------------------------------|
| Part No. | Type Code | W | F | Е | A0 | B0 |
| MCR004 | YZP | 8.0±0.2 | 3.5±0.05 | 1.75±0.1 | 0.24±0.03 | 0.45±0.03 |
| MCR006 | YLP | 8.0±0.2 | 3.5±0.05 | 1.75±0.1 | 0.38±0.03 | 0.68±0.03 |
| MCR01 | MZP | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 0.7±0.1 | 1.2±0.1 |
| MCR03 | EZP | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 1.1±0.1 | 1.9±0.1 |
| MCR10 | EZP | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 1.65 +0.2 -0.1 | 2.4 ^{+0.2} _{-0.1} |
| MCR18 | EZP | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 1.95 ^{+0.1} _{-0.05} | 3.5 ^{+0.15} _{-0.05} |

| Part No. | Type Code | D0 | P0 | P1 | P2 | T2 |
|----------|-----------|------------------------|---------|----------|----------|---------|
| MCR004 | YZP | φ1.5 ^{+0.1} | 4.0±0.1 | 2.0±0.05 | 2.0±0.05 | Max 0.5 |
| MCR006 | YLP | φ1.5 ^{+0.1} | 4.0±0.1 | 2.0±0.05 | 2.0±0.05 | Max 0.5 |
| MCR01 | MZP | φ1.5 ^{+0.1} 0 | 4.0±0.1 | 2.0±0.05 | 2.0±0.05 | Max 1.1 |
| MCR03 | EZP | φ1.5 ^{+0.1} 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | Max 1.1 |
| MCR10 | EZP | φ1.5 ^{+0.1} 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | Max 1.1 |
| MCR18 | EZP | φ1.5 ^{+0.1} 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | Max 1.1 |

■ Embossed Tape



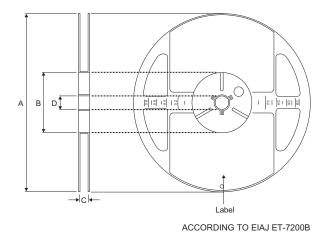
| | | | | | | (Unit : mm) |
|----------|-----------|---------|----------|----------|---------|-------------|
| Part No. | Type Code | W | F | E | A0 | B0 |
| MCR25 | JZH | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 3.0±0.1 | 3.5±0.1 |
| MCR50 | JZH | 12±0.3 | 5.5±0.05 | 1.75±0.1 | 3.4±0.2 | 5.6±0.2 |
| MCR100 | JZH | 12±0.3 | 5.5±0.05 | 1.75±0.1 | 3.5±0.2 | 6.7±0.2 |

| Part No. | Type Code | D0 | P0 | P1 | P2 | T2 |
|----------|-----------|------------------------|---------|---------|----------|---------|
| MCR25 | JZH | φ1.5 ^{+0.1} | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | Max 1.1 |
| MCR50 | JZH | φ1.5 ^{+0.1} 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | Max 1.1 |
| MCR100 | JZH | φ1.5 ^{+0.1} 0 | 4.0±0.1 | 4.0±0.1 | 2.0±0.05 | Max 1.1 |

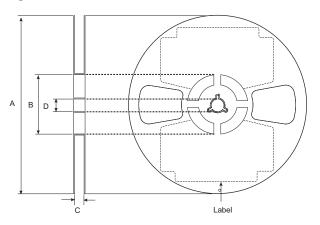
Datasheet

•Reel Dimensions

$\textcircled{1}\ \mathsf{MCR004}\ /\ \mathsf{006}\ /\ \mathsf{01}\ /\ \mathsf{03}\ /\ \mathsf{10}\ /\ \mathsf{18}\ /\ \mathsf{25}\ /\ \mathsf{50}\ /\ \mathsf{100}$



② MCR004 / 006 / 01 / 03 / 10 / 18 / 25



ACCORDING TO EIAJ ET-7200B (RRV)

(Unit: mm)

| | | | | | (01110 : 111111) |
|----------|------------|---|----------|---------|------------------|
| Part No. | Type Code | А | В | С | D |
| MCR004 | YZP | | | | |
| MCR006 | YLP | | | 9 +1.0 | |
| MCR01 | MZP | | | | |
| MCR03 | EZP MZP | | | | |
| MCR10 | EZP | $\phi 180 \begin{array}{c} 0 \\ -1.5 \end{array}$ | φ60 +1.0 | 0 | φ13±0.2 |
| MCR18 | EZP | -1.5 | 0 | | |
| MCR25 | JZH | | | | |
| MCR50 | JZH | | | 13 +1.0 | |
| MCR100 | JZH | | | 13 0 | |

Notice

Precaution on using ROHM Products

1. If you intend to use our Products in devices requiring extremely high reliability (such as medical equipment (Note 1), aircraft/spacecraft, nuclear power controllers, etc.) and whose malfunction or failure may cause loss of human life, bodily injury or serious damage to property ("Specific Applications"), please consult with the ROHM sales representative in advance. Unless otherwise agreed in writing by ROHM in advance, ROHM shall not be in any way responsible or liable for any damages, expenses or losses incurred by you or third parties arising from the use of any ROHM's Products for Specific Applications.

(Note1) Medical Equipment Classification of the Specific Applications

| Ì | JÁPAN | USA | EU | CHINA |
|---|---------|---------|------------|----------|
| Γ | CLASSⅢ | CLASSII | CLASS II b | CLASSIII |
| Γ | CLASSIV | | CLASSⅢ | |

- 2. ROHM designs and manufactures its Products subject to strict quality control system. However, semiconductor products can fail or malfunction at a certain rate. Please be sure to implement, at your own responsibilities, adequate safety measures including but not limited to fail-safe design against the physical injury, damage to any property, which a failure or malfunction of our Products may cause. The following are examples of safety measures:
 - [a] Installation of protection circuits or other protective devices to improve system safety
 - [b] Installation of redundant circuits to reduce the impact of single or multiple circuit failure
- 3. Our Products are not designed under any special or extraordinary environments or conditions, as exemplified below. Accordingly, ROHM shall not be in any way responsible or liable for any damages, expenses or losses arising from the use of any ROHM's Products under any special or extraordinary environments or conditions. If you intend to use our Products under any special or extraordinary environments or conditions (as exemplified below), your independent verification and confirmation of product performance, reliability, etc, prior to use, must be necessary:
 - [a] Use of our Products in any types of liquid, including water, oils, chemicals, and organic solvents
 - [b] Use of our Products outdoors or in places where the Products are exposed to direct sunlight or dust
 - [c] Use of our Products in places where the Products are exposed to sea wind or corrosive gases, including Cl₂, H₂S, NH₃, SO₂, and NO₂
 - [d] Use of our Products in places where the Products are exposed to static electricity or electromagnetic waves
 - [e] Use of our Products in proximity to heat-producing components, plastic cords, or other flammable items
 - [f] Sealing or coating our Products with resin or other coating materials
 - [g] Use of our Products without cleaning residue of flux (even if you use no-clean type fluxes, cleaning residue of flux is recommended); or Washing our Products by using water or water-soluble cleaning agents for cleaning residue after soldering
 - [h] Use of the Products in places subject to dew condensation
- 4. The Products are not subject to radiation-proof design.
- 5. Please verify and confirm characteristics of the final or mounted products in using the Products.
- 6. In particular, if a transient load (a large amount of load applied in a short period of time, such as pulse. is applied, confirmation of performance characteristics after on-board mounting is strongly recommended. Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
- 7. De-rate Power Dissipation (Pd) depending on Ambient temperature (Ta). When used in sealed area, confirm the actual ambient temperature.
- 8. Confirm that operation temperature is within the specified range described in the product specification.
- 9. ROHM shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.

Precaution for Mounting / Circuit board design

- 1. When a highly active halogenous (chlorine, bromine, etc.) flux is used, the residue of flux may negatively affect product performance and reliability.
- 2. In principle, the reflow soldering method must be used on a surface-mount products, the flow soldering method must be used on a through hole mount products. If the flow soldering method is preferred on a surface-mount products, please consult with the ROHM representative in advance.

For details, please refer to ROHM Mounting specification

Precautions Regarding Application Examples and External Circuits

- 1. If change is made to the constant of an external circuit, please allow a sufficient margin considering variations of the characteristics of the Products and external components, including transient characteristics, as well as static characteristics.
- 2. You agree that application notes, reference designs, and associated data and information contained in this document are presented only as guidance for Products use. Therefore, in case you use such information, you are solely responsible for it and you must exercise your own independent verification and judgment in the use of such information contained in this document. ROHM shall not be in any way responsible or liable for any damages, expenses or losses incurred by you or third parties arising from the use of such information.

Precaution for Electrostatic

This Product is electrostatic sensitive product, which may be damaged due to electrostatic discharge. Please take proper caution in your manufacturing process and storage so that voltage exceeding the Products maximum rating will not be applied to Products. Please take special care under dry condition (e.g. Grounding of human body / equipment / solder iron, isolation from charged objects, setting of lonizer, friction prevention and temperature / humidity control).

Precaution for Storage / Transportation

- 1. Product performance and soldered connections may deteriorate if the Products are stored in the places where:
 - [a] the Products are exposed to sea winds or corrosive gases, including Cl2, H2S, NH3, SO2, and NO2
 - [b] the temperature or humidity exceeds those recommended by ROHM
 - [c] the Products are exposed to direct sunshine or condensation
 - [d] the Products are exposed to high Electrostatic
- Even under ROHM recommended storage condition, solderability of products out of recommended storage time period
 may be degraded. It is strongly recommended to confirm solderability before using Products of which storage time is
 exceeding the recommended storage time period.
- 3. Store / transport cartons in the correct direction, which is indicated on a carton with a symbol. Otherwise bent leads may occur due to excessive stress applied when dropping of a carton.
- 4. Use Products within the specified time after opening a humidity barrier bag. Baking is required before using Products of which storage time is exceeding the recommended storage time period.

Precaution for Product Label

QR code printed on ROHM Products label is for ROHM's internal use only.

Precaution for Disposition

When disposing Products please dispose them properly using an authorized industry waste company.

Precaution for Foreign Exchange and Foreign Trade act

Since concerned goods might be fallen under listed items of export control prescribed by Foreign exchange and Foreign trade act, please consult with ROHM in case of export.

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Rev.001

AMEYA360 Components Supply Platform

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