



Approval Sheet

for

Metal Film Resistors Professional Type

MF0 series

0 ohm Type

YAGEO CORPORATION

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| Rev. | Description | Issue Date | Drawn | Approved |
|------|-----------------|--------------|---------|------------|
| 00 | issue new spec. | Nov 06, 2012 | Feng Ye | Flora Shen |
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| Description | Metal Film Resistors, Professional Type | | |
|-------------|---|------|----|
| Series | MF0 | Rev. | 00 |





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1. PRODUCT:

METAL FILM RESISTORS, PROFESSIONAL TYPE

2. PART NUMBER:

Part number of the metal film resistor is identified by the name, power, tolerance, packing, temperature coefficient, special type and resistance value.

Example :

| MF0 | 207 | - | Т | - | 52- | 0R |
|-----------|-------------------------------|---------------------------------------|--------------------------------------|--|-------------------------------|---|
| | (2) Power Rating | (3) Resistance Tolerance | (4) Packing Style | (5) Temperature Coefficient of Resistance | (6) Special Type | (7) Resistance Value |
| (1) Style | e: MF0 SI | ERIES | | | | |
| (2) Pow | er Rating | j∶ 204 = 0.4V | V × 207 = (| 0.6W | | |
| (3) Tole | rance : | "-" = not appli | cable | | | |
| (4) Pacl | kaging Ty | T= | =Paper Ta =Tape on I =Bulk Pac | Box Packing | | |
| (5)Temp | perature | Coefficient : | "-" = not a | pplicable | | |
| (6) Spe | cial Type | 52 M M FT | Г = M-Туре ` = F-Туре | Forming for Bul e Forming for Ta | aping (Ra bing (Rat | ated 0204 size only) ed 0207 size only) v) |

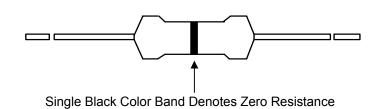
PN = PANAsert (Rated 0207 size only) AV = Avlsert (Rated 0207 size only)

(7) Resistance Value : 0R = 0 ohm





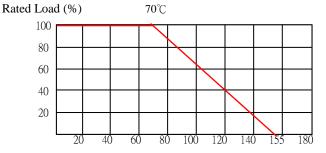
3. BAND-CODE:

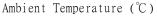


4. ELECTRICAL CHARACTERISTICS

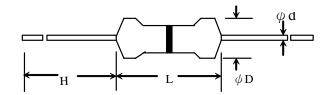
| STYLE | MF0204 | MF0207 | |
|---|---------------------|--------|--|
| Power Rating at 70 $^{\circ}$ C | 0.4W | 0.6W | |
| Maximum Current Rating at 70 $^\circ\!\!\mathbb{C}$ | 1.5A | 2.5A | |
| Voltage Proof 300V | | 500V | |
| Resistance Value | Less than 20 mΩ | | |
| Operating Temp. Range | - 55 °C to + 155 °C | | |

5. DERATING CURVE





6. **DIMENSIONS**



| | | | | Unit : mm |
|--------|---------|---------|--------|-----------|
| STYLE | L | ϕD | Н | ϕd |
| MF0204 | 3.4±0.3 | 1.9±0.2 | 28±2.0 | 0.45±0.05 |
| MF0207 | 6.3±0.5 | 2.4±0.2 | 28±2.0 | 0.55±0.05 |





7. ENVIRONMENTAL CHARACTERISTICS

(1) Voltage Proof

The resistor shall be clamped in the trough of a 90° metal V Block. Apply the insulation voltage specified in the "Table I " between the terminals connected together with the block for about 60 seconds. The resistor shall be able to withstand without breakdown or flashover.

(2) Insulation Resistance

Apply "measuring voltage" between protective coating and termination for 1 min.,then measure. The measuring voltage shall be either 100V±15V d.c. for resistors with an insulation voltage lower than 500V or 500V±50V d.c. for resistors with an insulatin voltage equal to or greater than 500V. The test resistance should be high than 10,000M ohm.

(3) Solderability

Immerse the specimen into the solder pot at 235 ± 5 °C for 3 ± 0.5 seconds. At least 95% solder coverage on the termination.

(4) Solvent Resistance of Marking

The specimen into the appropriate solvent of IPA condition of ultrasonic machine for 5 ± 0.5 minutes. The specimen is no deterioration of coatings and color code

(5) Robustness of Terminations

Direct Load – Resistors shall be held by one terminal and the load shall be gradually applied in the direction of the longitudinal axis of the resistor unit the applied load reached the requirement. The load shall be held for 10 seconds. The load of weight shall be ≥ 2.5 kg (24.5N).

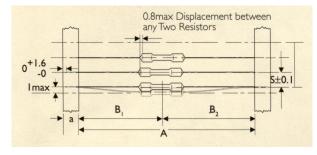
(6) Resistance to Soldering Heat

The terminal lead shall be dipped into the solder pot at 260 \pm 3 °C for 10 \pm 1.0 seconds up to 2.5 ~ 3.5 mm.

The change of the resistance value shall be within 5 m Ω .

8. PACKING METHODS

Bandolier for Axial leads

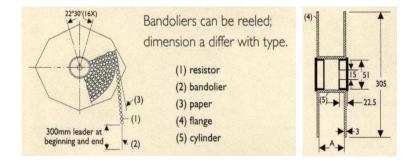


| а | A | B1-B2 | S (spacing) | T (max. deviation of spacing) |
|--|----------------|--|---|---|
| | 50.4 + 4.0 | | | |
| | 52.4 ± 1.0 | 1.2 | F | |
| 0 ± 0.5 | 26.0 ± 1.0 | 1.0 | Э | 0.5 mm per 5 spacing |
| $6 \pm 0.5 \qquad \frac{52.4 \pm 1.0}{26.0 \pm 1.0}$ | 52.4 ± 1.0 | 1.2 | 5 | 1 mm per 10 spacing |
| | 26.0 ± 1.0 | 1.0 | | |
| | ± 0.5 ± 0.5 | $\begin{array}{r} \pm 0.5 \\ \hline 26.0 \pm 1.0 \\ \hline 52.4 \pm 1.0 \\ \hline \end{array}$ | $\begin{array}{c} \pm 0.5 \\ \hline 26.0 \pm 1.0 \\ \pm 0.5 \\ \hline 52.4 \pm 1.0 \\ \hline 1.2 \\ \hline \end{array}$ | $\begin{array}{c} \pm 0.5 \\ \hline 26.0 \pm 1.0 \\ \hline 52.4 \pm 1.0 \\ \hline 1.2 \\ \hline 5 \\ 5 \\ \hline 5 \\ 5 \\ \hline 5 \\ 5 \\ \hline 5 \\ \hline$ |



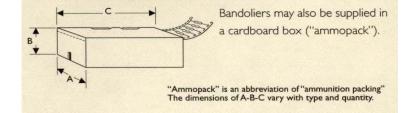


9. TAPE ON REEL PACKING



| STYLE | ACROSS FLANGE (A) | Qty per reel |
|--------|-------------------|--------------|
| MF0204 | 72 | 5,000 |
| MF0207 | 72 | 5,000 |

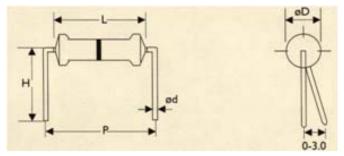
10. TAPE ON BOX PACKING



| | Stand | lard Lead L | ength | Short Lead Length | | | Qty per box |
|--------|-------|-------------|-------|-------------------|------|------|-------------|
| STYLE | W(A) | H(B) | L(C) | W(A) | H(B) | L(C) | |
| MF0204 | 81 | 70 | 260 | 48 | 102 | 255 | 5,000 |
| MF0207 | 81 | 104 | 260 | 48 | 102 | 255 | 5,000 |

11. SPECIAL TYPE (FORMING DIMENSIONS)

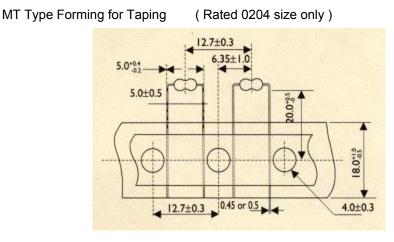
M TYPE Forming for Bulk



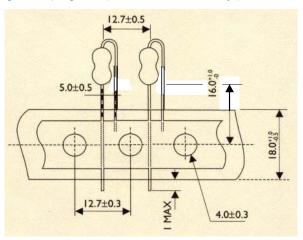
| | | | | | UNIT : mm |
|--------|-----------|-----------|-------------|----------|-----------|
| STYLE | L | ϕD | ϕd | Р | н |
| MF0204 | 3.4 ± 0.3 | 1.9 ± 0.2 | 0.45 ± 0.05 | 6.0 ± 1 | 10.0 ± 1 |
| MF0207 | 6.3 ± 0.5 | 2.4 ± 0.2 | 0.55 ± 0.05 | 10.0 ± 1 | 10.0 ± 1 |



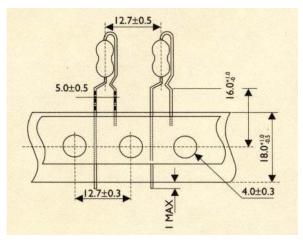




FT Type Forming for Taping (Rated 0207 size only)



PN Type Forming for Taping (Rated 0207 size only)

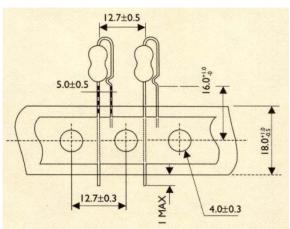






AV Type Forming for Taping (F

(Rated 0207 size only)



12. Plant Address

- A. China Dongguan Plant 7-1, Gaoli Road, Gaoli Industrial Zone Tangxia Zhen, Dongguan, Guangdong, China (廣東省東莞市塘廈鎭高麗工業區高麗路 7-1 號) Tel. 86-769-8772 0275 Fax. 86-769-8772 0275 #4333
- B. China Mudu Plant No.158, Jinchang Road, No.1 Building of Nan Bang IND. Zone, Mu Du New District, Suzhou, China (江蘇省蘇州市木瀆新區金長路 158 號南濱工業區 1 號) Tel. 86-512-66518889 Fax. 86-512-66519889