**MEC Crystals** 

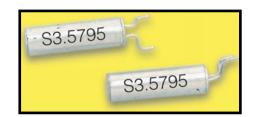
Cylindrical Type (3 x 9mm)

#### **Features:**

- High Stability.
- Small package.
- Excellent environmental capability.
- 3000pcs / Reel
- RoHs Compliant (Pb Free)

#### **Applications:**

- Communication equipment.
- AV equipment.
- O A equipment.
- Measuring instruments.



# **Electrical Specifications:**

| Frequency Range                     | 3.579MHz ~ 27.000 MHz        |
|-------------------------------------|------------------------------|
| Frequency Tolerance at 25°C         | ±15ppm, ±30ppm, ±50ppm       |
| Frequency Stability (-10°C ~ +60°C) | ±30ppm, ±50ppm               |
| Operating Temperature Range         | -40°C ~ +85°C                |
| Storage Temperature Range           | -55°C ~ +125°C               |
| Load Capacitance (CL)               | 16.0pF (Typical) or specify  |
| Aging                               | ±5.0 ppm / year max. at 25°C |
| Insulation Resistance               | 500MΩ at DC 100V             |
| Shunt Capacitance                   | 5.0pF max.                   |
| Drive Level                         | 10 ~ 50ΩW                    |
| Equivalent Series Resistance        | see chart.                   |

# Equivalent Series Resistance (ESR) & Mode of Operation (Mode):

| Frequency Range  | E.S.R.<br>(Ω) max. | Mode        | Frequency Range    | E.S.R.<br>(Ω) | Mode        |
|------------------|--------------------|-------------|--------------------|---------------|-------------|
| 3.579 ~ 4.499MHz | 150                | Fundamental | 10.000 ~ 11.999MHz | 80            | Fundamental |
| 4.500 ~ 4.999MHz | 130                | Fundamental | 12.000 ~ 13.999MHz | 70            | Fundamental |
| 5.000 ~ 6.999MHz | 120                | Fundamental | 14.000 ~ 15.999MHz | 50            | Fundamental |
| 7.000 ~ 9.999MHz | 100                | Fundamental | 16.000 ~ 27.000MHz | 35            | Fundamental |

## **Part Numbering System:**

309T 3.6864 F 18 3 5 6





3 Mode of Vibration

| _    | _        |   |    |
|------|----------|---|----|
| Code | Cut-Mode |   | de |
| F    | AT Fund  |   | 6  |
|      |          | 1 | 6  |
|      |          |   | ٥  |

4 Load Capacitance CL Load Capacitance 16pF

18pF

20pF

| CL | S Frequency Tolerance |           |  |
|----|-----------------------|-----------|--|
|    | Code                  | Tolerance |  |
| Ð  | 1                     | ± 10 ppm  |  |
| 4  | 2                     | ± 20 ppm  |  |
| 4  | 3                     | ± 30 ppm  |  |
|    |                       |           |  |

**6** Frequency Stability

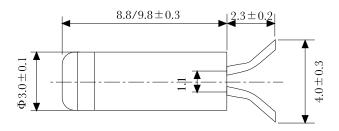
| Code | Stability |
|------|-----------|
| 3    | ± 30 ppm  |
| 4    | ± 40 ppm  |
| 5    | ± 50 ppm  |

20

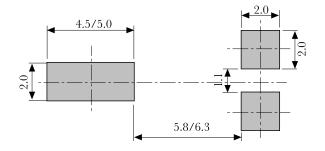
**MEC Crystals** 

Cylindrical Type (3 x 9mm)

# **Dimensions (mm):**



# Recommended Soldering (mm):



# Frequency vs. Temperature:

