

7E

[2.5×2.0×0.55 mm]

7U

[3.2×2.5×0.70 mm]

7V

[3.2×2.5×0.80 mm]

Surface Mount Crystals

7E, 7U, 7V

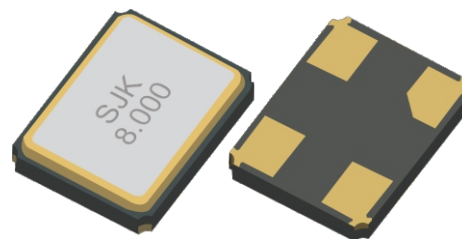
Fundamental

Frequency Range

8MHz~125MHz

Features

- Small size SMD crystal units with 2.5×2.0 (2520), 3.2×2.5 (3225), seam sealed package or glass sealed package.
- The entire package can be grounded via the top metal lid and the bottom pads
- Small footprint. Ideal for space constrained applications
- Exhibits extremely low aging with a high shock & vibration resistance
- Applications: Mobile phone, WI-LAN, Wireless communications, Bluetooth, Clock for MPU, Radio communications, etc.



Standard Specifications

| Item / Type | 7E (2.5×2.0×0.55 mm) | 7U (3.2×2.5×0.70 mm) | 7V (3.2×2.5×0.80 mm) |
|-------------------------------|----------------------------------|-----------------------|----------------------|
| Frequency Range | 12~96 MHz (Fund.) | 8~125 MHz (Fund./3rd) | 8~60 MHz (Fund.) |
| Load Capacitance | 8pF~32pF, or specify | | |
| Drive Level | 10 μW typical (200 μW max.) | | |
| Frequency Tolerance (at 25°C) | ± 10ppm, ±20ppm or ±30ppm (max.) | | |
| Aging | ±3ppm / Year (max.) | | |
| Storage Temperature Range | -55°C~+125°C | | |

ESR (Equivalent Series Resistance)

| 7E (2.5×2.0×0.55 mm) | | 7U (3.2×2.5×0.70 mm) | | 7V (3.2×2.5×0.80 mm) | |
|----------------------|------------|----------------------|------------|----------------------|------------|
| Frequency Range | E.S.R | Frequency Range | E.S.R | Frequency Range | E.S.R |
| 12.0~16.0MHz | 150 Ω max. | 8.0~10.0 MHz | 500 Ω max. | 8.0~10.0 MHz | 500 Ω max. |
| 16.0~20.0MHz | 100 Ω max. | 10.0~12.0 MHz | 200 Ω max. | 10.0~12.0 MHz | 200 Ω max. |
| 20.0~30.0MHz | 80 Ω max. | 12.0~64.0 MHz | 80 Ω max. | 12.0~30.0MHz | 80 Ω max. |
| 30.0~60.0MHz | 60 Ω max. | 64.0~80.0 MHz | 120 Ω max. | 30.0~60.0 MHz | 60 Ω max. |
| 60.0~96.0MHz | 50 Ω max. | 80.0~125.0 MHz | 80 Ω max. | | |

Frequency stability Vs Operating temperature range

| Temp. (°C) | ppm | | | | | |
|------------|-----|-----|-----|-----|-----|-----|
| | ±5 | ±10 | ±15 | ±20 | ±25 | ±30 |
| -10~+60 | ▲ | ○ | ○ | ○ | ○ | ○ |
| -20~+70 | × | ○ | ○ | ○ | ○ | ○ |
| -40~+85 | × | × | ○ | ○ | ○ | ○ |

▲: Conditional
○: Available
×: Not available

7E

7U

7V

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Fundamental

Frequency Range
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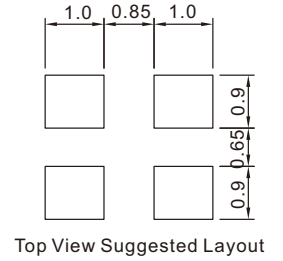
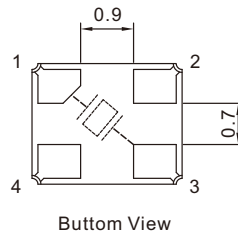
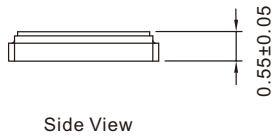
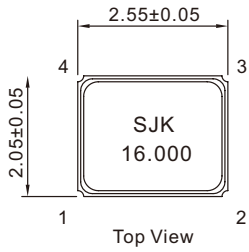
[2.5×2.0×0.55 mm]

[3.2×2.5×0.70 mm]

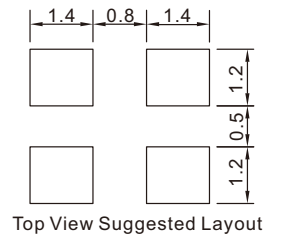
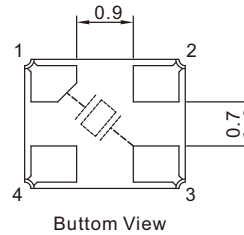
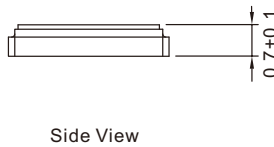
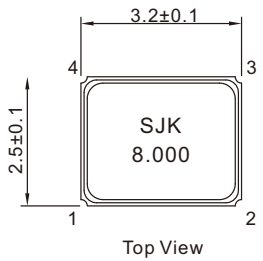
[3.2×2.5×0.80 mm]

Outline Dimensions (Unit: mm)

7E (2.5×2.0×0.55 mm)



7U (3.2×2.5×0.70 mm)



7V (3.2×2.5×0.80 mm)

