

HE-MCC-120 MINIATURE CERAMIC CRYSTAL

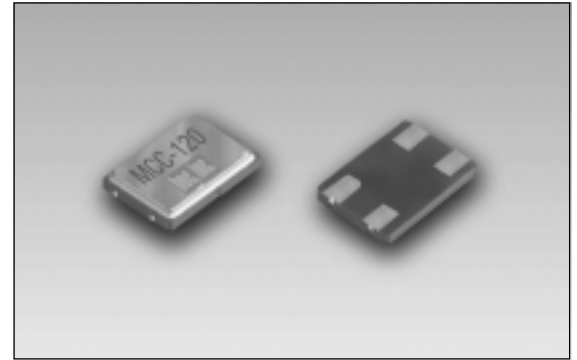
HE-MCC-120 series is a ceramic base surface mount crystal with a maximum height of 1.3mm and a very wide frequency range of 8.00 MHz to 125.00 MHz. This crystal is ideal for space limited applications such as palm top PDA, PCMCIA Ethernet cards, PCMCIA fax modem cards, and hard disk drive controllers.

FEATURES:

- 1.3 mm maximum height
- Industry standard footprint
- Wide frequency range
- Good tolerance and stability
- Tape and Reel (1,000 PC / reel)

OPTIONS:

- Extended temp. range



* Selected frequencies

ELECTRICAL SPECIFICATIONS / PART NUMBERING GUIDE

| PARAMETERS | CONDITIONS | MINIMUM | STANDARD | MAXIMUM | UNIT |
|-------------------------------------|---------------------|---|----------|---------|------|
| FREQUENCY RANGE | | 8.000 | | 125.000 | MHz |
| FREQUENCY TOLERANCE | at 25 °C | -50* | | +50* | PPM |
| FREQ. STABILITY (ref. @ 25°C) | 8 MHz to 125 MHz | -50* | | +50* | PPM |
| OPERATING TEMPERATURE | | -10 °C to +60 °C / -40 °C to +85 °C Optional | | | °C |
| STORAGE TEMPERATURE | | -30 °C to +85 °C / -55 °C to +125 °C Optional | | | °C |
| SHUNT CAPACITANCE (C ₀) | | | | 5.0 | pF |
| LOAD CAPACITANCE (C _L) | To be specified | 10.0 | 18.0 | | pF |
| DRIVE LEVEL | 8.000 - 125.000 MHz | | 0.1 | 0.5 | mW |
| AGING CHARACTERISTICS | | ± 5 PPM max. @ 25 °C per year | | | |

* Tight tolerances optional - please specify

| EQUIVALENT SERIES RESISTANCE (ESR) | | | | | |
|------------------------------------|-----------|--------------|-----------------------|----------|--------------|
| Frequency Range (MHz) | OSC. Mode | Max. ESR (Ω) | Frequency Range (MHz) | OSC Mode | Max. ESR (Ω) |
| 8.000 - 15.999 | FUND | 60 | 28.000 - 100.000 | 3rd OT | 60 |
| 16.000 - 42.000 | FUND | 40 | 84.000 - 125.000 | 5th OT | 80 |

| HE-MCC-120 | -32.000F | -20 | -E |
|------------|--|--|---|
| Package | Frequency F = Fundamental (freq > 25 MHz) | Capacitance Load Blank = 18pF, S = Series | E = Ext. temp -40+85°C XPPM = Specify stability option |

MECHANICAL DRAWING

