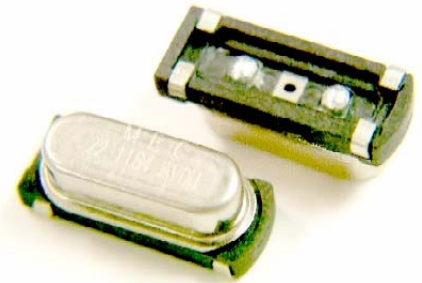


- MP4 surface mount crystals feature metal can low profile crystal mounted on a plastic molded lead frame base.
- Available in EIA-481A-2 24 mm tape and reel. 1000 pcs per reel.



**SPECIFICATIONS**

<b>Crystal Holder Prefix:</b>	<i>MP4</i> (4.25 mm height)					
<b>Mode of Oscillation:</b>	3.5 ~ 30.0 MHz AT-cut Fundamental mode 30.1 ~ 70.0 MHz AT-cut 3 <sup>rd</sup> Overtone mode 25.0 ~ 40.0 MHz BT-cut Fundamental mode					
<b>Calibration Tolerance:</b>	±30ppm (±0.003 %) at 25°C					
<b>Frequency Stability:</b>	AT-cut: ±30 ppm (±0.003 %) over -10 to +60°C BT-cut: ±100 ppm (±0.01 %) over -10 to +60°C					
<b>Shunt Capacitance (Co):</b>	7 pF maximum					
<b>Equivalent Series Resistance (E.S.R.)</b>	Frequency	Osc. Mode	ESR max.	Frequency	Osc. mode	ESR max.
	3.20 ~ 3.56	AT funda.	200 Ω	9.0 ~ 12.99	AT funda.	60 Ω
	3.57 ~ 3.99	AT funda.	180 Ω	13.0 ~ 15.99	AT funda.	50 Ω
	4.0 ~ 4.99	AT funda.	150 Ω	16.0 ~ 30.00	AT funda.	40 Ω
	5.0 ~ 5.99	AT funda.	120 Ω	27.0 ~ 40.00	BT funda.	40 Ω
	6.0 ~ 6.99	AT funda.	100 Ω	30.0 ~ 70.00	AT 3 <sup>rd</sup> O/T	100 Ω
	7.0 ~ 8.99	AT funda.	80 Ω			
<b>Load Capacitance (CL):</b>	Series ( <b>S</b> ) or Parallel (If parallel, please specify CL value, typical CL ranges from 8 to 32pF)					
<b>Drive Level:</b>	0.5 mW maximum					
<b>Aging:</b>	Less than ±5ppm per year. at +25°C.					
<b>Reflow Soldering:</b>	10 seconds maximum at +260°C					
<b>Storage Temperature:</b>	-30 to +85°C					

**Note:** Tighter tolerance, tighter stability and lower ESR are available.

**MERCURY** www.mercury-crystal.com

Taiwan: TEL (886)-2-2695-7099, FAX (886)-2-2695-7473, e-mail: sales-tw@mercury-crystal.com

U.S.A.: TEL (1)-909-466-0427, FAX (1)-909-466-0762, e-mail: [sales-us@mercury-crystal.com](mailto:sales-us@mercury-crystal.com)

**STANDARD FREQUENCIES AND PART NUMBERS** (partial frequency list only. Frequency tolerance, frequency stability and ESR can be specified per your requirements).

**MEC Part Number      MEC Specification Code**

MP4-3.579545-18P	50/50/-10+70/200R
MP4-3.6864-20P	50/50/-10+70/200R
MP4-4.000-20P	50/50/-10+70/150R
MP4-4.032-20P	50/50/-10+70/150R
MP4-4.096-20P	50/50/-10+70/150R
MP4-4.433619-18P	50/50/-10+70/150R
MP4-4.9152-18P	50/50/-10+70/150R
MP4-5.0688-18P	50/50/-10+70/150R
MP4-6.000-18P	50/50/-10+70/100R
MP4-6.144-18P	50/50/-10+70/100R
MP4-7.3728-18P	50/50/-10+70/100R
MP4-8.000-18P	50/50/-10+70/100R
MP4-9.8304-20P	50/50/-10+70/100R
MP4-11.0592-20P	50/50/-10+70/80R
MP4-12.000-18P	50/50/-10+70/80R
MP4-14.31818-18P	50/50/-10+70/50R
MP4-14.7456-S	50/50/-10+70/50R

**MEC Part Number      MEC Specification Code**

MP4-16.000312-32P	50/50/-10+70/50R
MP4-18.432-S	50/50/-10+70/50R
MP4-19.6608-S	50/50/-10+70/50R
MP4-20.000-20P	50/50/-10+70/50R
MP4-24.000-S	50/50/-10+70/50R
MP4-24.576-S	50/50/-10+70/50R
MP4-29.4912AF-S	50/50/-10+70/50R (AT-cut Fund.)
MP4-30.000A3-S	50/50/-10+70/140R (AT-cut 3 <sup>rd</sup> O/T)
MP4-30.000A3-S	50/50/-10+70/140R (AT-cut 3 <sup>rd</sup> O/T)
MP4-32.000A3-S	50/50/-10+70/140R (AT-cut 3 <sup>rd</sup> O/T)
MP4-36.000A3-S	50/50/-10+70/100R (AT-cut 3 <sup>rd</sup> O/T)
MP4-40.000A3-S	50/50/-10+70/100R (AT-cut 3 <sup>rd</sup> O/T)
MP4-29.4912BF-S	50/100/-10+70/50R (BT-cut Funda.)
MP4-30.000BF-S	50/100/-10+70/40R (BT-cut Funda.)
MP4-36.000BF-S	50/100/-10+70/40R (BT-cut Funda.)
MP4-40.000BF-S	50/100/-10+70/40R (BT-cut Funda.)

**PACKAGE DIMENSIONS AND SUGGESTED PAD LAYOUT**

Unit: mm [inches]

