Vishay Dale



Low Profile Holder Type Crystal Units



FEATURES

- Low cost
- Industry standard
- Wide frequency range
- Excellent aging
- Compliant to RoHS directive 2002/95/EC

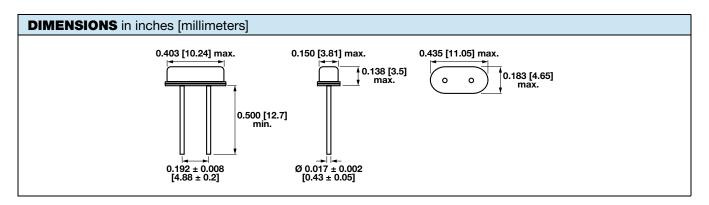


RoHS COMPLIAN

This part is a miniature AT cut strip crystal unit with a low profile package. It is with resistance weld.

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | |
|------------------------------------|-------------------|---------------------|------|----------|------|--------|
| PARAMETER | SYMBOL | CONDITION | UNIT | MIN. | TYP. | MAX. |
| Frequency range | F _O | | MHz | 3.579545 | - | 66.000 |
| Frequency tolerance | ΔF/F _O | at 25 °C | ppm | - 30 | = | + 30 |
| Temperature stability | T _C | ref. to 25 °C | ppm | - 50 | = | + 50 |
| Operating temperature range | T _{OPR} | | °C | - 10 | = | + 70 |
| Storage temperature range | T _{STG} | | °C | - 55 | = | + 125 |
| Shunt capacitance | C ₀ | | pF | - | = | 7 |
| Load capacitance | C_L | customer specified | pF | 10 | - | series |
| Insulation resistance | I _R | 100 V _{DC} | MΩ | 500 | - | - |
| Drive level | D _L | | μW | - | 100 | 500 |
| Aging (first year) | Fa | at 25 °C, per year | ppm | - 5 | - | + 5 |

| EQUIVALENT SERIES RESISTANCE (ESR) AND MODE OF VIBRATION (MODE) | | | | | | | | |
|---|-----------------------|----------------|-----------------------|-----------------------|--------------------------|--|--|--|
| FREQUENCY RANGE (MHz) | MAX. ESR (Ω) | MODE | FREQUENCY RANGE (MHz) | MAX. ESR (Ω) | MODE | | | |
| 3.579 to 3.999 | 200 | fundamental/AT | 10.000 to 13.999 | 80 | fundamental/AT | | | |
| 4.000 to 4.999 | 150 | fundamental/AT | 14.000 to 39.999 | 50 | fundamental/AT | | | |
| 5.000 to 5.999 | 120 | fundamental/AT | 40.000 to 66.000 | 80 | 3 rd overtone | | | |
| 6.000 to 9.999 | 100 | fundamental/AT | | | | | | |



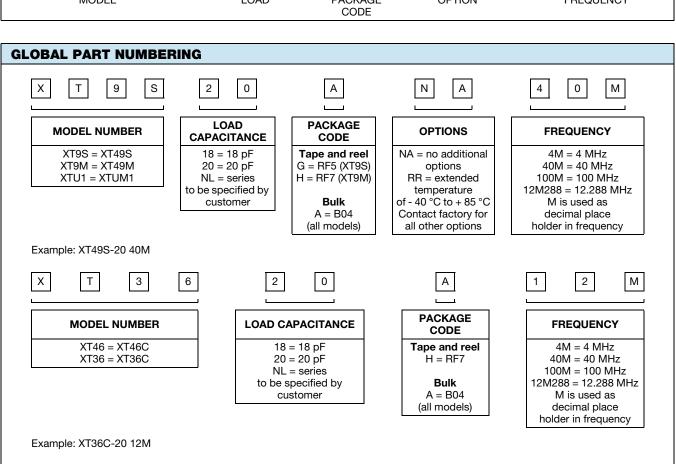
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| | ORDERING INFORMATION | | | | | | |
|---|----------------------|---|--|--|---------------|----------------------------------|--|
| ı | XT49S | R | -20 | SP | 12M | e2 | |
| | MODEL | OTR blank = standard R = - 40 °C to + 85 °C | LOAD blank = series -16 = 16 pF -20 = 20 pF standard -30 = 30 pF -32 = 32 pF | OPTIONS blank = standard SP = spacer SL = sleeve | FREQUENCY/MHz | JEDEC LEAD (Pb)-FREE STANDARD | |

| GLOBAL PART NUMBER | | | | |
|--------------------|-------------|-----------------|------------|-----------------|
| X T 9 S MODEL | 2 0 LOAD | PACKAGE CODE | N A OPTION | 1 2 M FREQUENCY |







Vishay

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