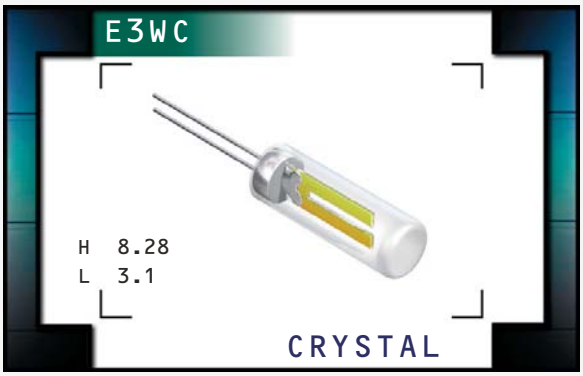
E3WC Series

- RoHS Compliant (Pb-Free)
- 32.768kHz watch crystal
- Miniature cylindrical package
- ±20ppm frequency tolerance
- 12.5pF load capacitance



NOTES

ELECTRICAL SPECIFICATIONS

Frequency	32.768kHz
Frequency Tolerance (at 25°C)	±20ppm
Frequency Stability	-0.042ppm / $(\Delta°C)^2$ Maximum, Parabolic; Turn Over Temperature at 25°C ±5°C
Operating Temperature Range	-10°C to 60°C
Aging (at 25°C)	±5ppm / year Maximum
Storage Temperature Range	-20°C to 70°C
Shunt Capacitance	0.85pF Typical, 2pF Maximum
Motional Capacitance	2.0fF Typical
Drive Level	1 µWatt Maximum
Equivalent Series Resistance	35,000 Ohms Maximum
Insulation Resistance	500 Megaohms Minimum at $100V_{DC}$
Load Capacitance (C_L)	12.5pF

MANUFACTURER	CATEGORY	SERIES	PACKAGE	CLASS	REV. DATE
ECLIPTEK CORP.	CRYSTAL	E3WC	CYLINDRICAL	CR49	08/05

Specifications subject to change without notice.

PART NUMBERING GUIDE

E3WC D A 12 - 32.768K

FREQUENCY TOLERANCE
D=±20ppm at 25°C

OPERATING TEMPERATURE RANGE
A=-10°C to +60°C

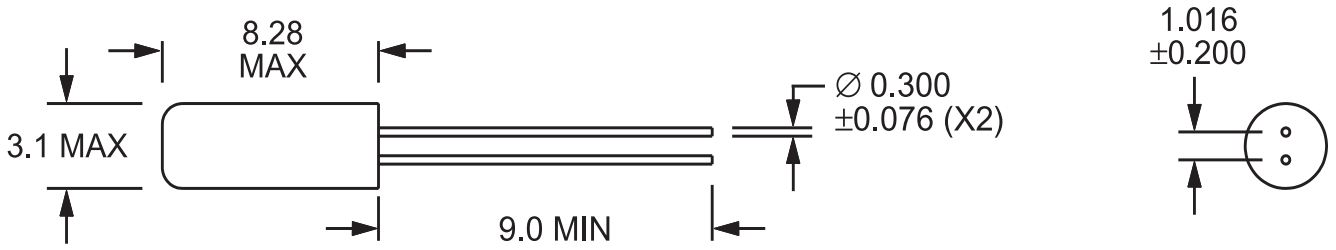
LOAD CAPACITANCE
12=12.5pF

NOMINAL FREQUENCY

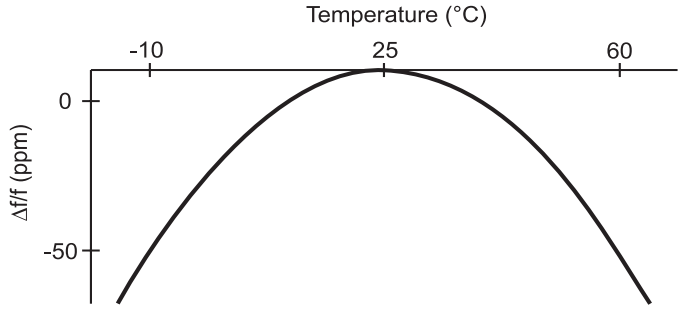
NOTES

MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



PARABOLIC TEMPERATURE CURVE



MARKING SPECIFICATIONS

Line 1: 32.768K
└ Nominal Frequency in kHz

MANUFACTURER	CATEGORY	SERIES	PACKAGE	CLASS	REV. DATE
ECLIPTEK CORP.	CRYSTAL	E3WC	CYLINDRICAL	CR49	08/05

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