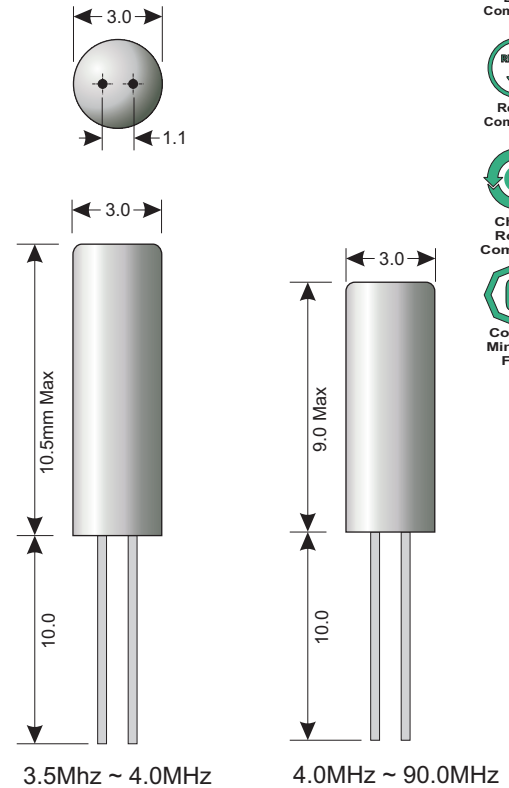




Specifications

Package		C39R - Miniature Cylinder
Frequency Range (fo)		3.50MHz ~ 90.00MHz
Mode of Operation		AT Fund./ 3rd Overtone / BT Fund.
Frequency Stability	Calib. Tol. @ 25°C	±50ppm
	Temp. Range	±50ppm
	Aging/Year (fa)	±5ppm
Temp. Range	Operating (TOPR)	-10°C ~ +60°C
	Storage (TSTG)	-40°C ~ +85°C
Drive Level (DL)		50mW ~ 100mW
Capacitance	Load (CL)	18pF
	Shunt (CO)	7pF Max
Equiv. Series Resist. (R1)		Varies per frequency (see chart)

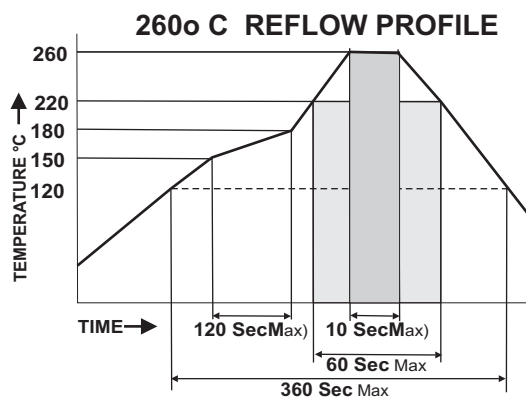
Dimensions (mm)



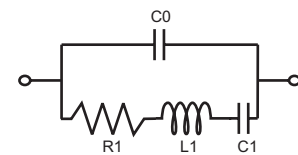
Equivalent Series Resistance (E.S.R.) Max

3.500 ~ 3.999MHz	AT-Cut Fund.	200Ω
4.000 ~ 5.999MHz	AT-Cut Fund.	150Ω
6.000 ~ 9.999MHz	AT-Cut Fund.	100Ω
10.000 ~ 29.999MHz	AT-Cut Fund.	50Ω
30.000 ~ 39.999MHz	AT-Cut 3rd O.T.	100Ω
40.000 ~ 90.000MHz	AT-Cut 3rd O.T.	60Ω

Frequencies below 30.000MHz default to AT-Cut Fund at the specified ESR.
 Frequencies between 30.000 ~90.000MHz default to AT-Cut 3rd O.T. at the specified ESR
 BT-Cut and 3rd O.T. may be specified with the "O" option where modes overlap (See Page 2).



Equivalent Circuit



- C0 Shunt Capacitance
- R1 Equivalent Series Resistance
- L1 Motion Inductance
- C1 Motion Capacitance



Environmental And Mechanical

Temperature	10 Cycles of -30°C (30Mins), Normal (1Hr), 85°C (30Mins), Normal (1Hr)
Shock	Accelerated at 1000G for 1mS in each perpendicular axis.
Vibration	4 Cycles of 20G acceleration at 20 - 2,000Hz within 4 Minutes in each perpendicular axis.
Solder	Peak Temperature of 260°C Max for 10 Seconds with preheat of 160°C for 90±10% for 10 Seconds for a Maximum of 2 Cycles.

Part Number

C39R - XX.XXX M-CX RX OX AX ZX-XX

Tolerance Stability

C1	10ppm/10ppm
C2	10ppm/20ppm
C3	10ppm/30ppm
C4	10ppm/50ppm
C5	15ppm/20ppm
C6	20ppm/20ppm
C7	20ppm/30ppm
C8	20ppm/50ppm
C9	30ppm/30ppm
C10	30ppm/50ppm
C11	40ppm/45ppm
C12	50ppm/100ppm
SC	Cust. Stability

Temp Range

R1	0°C ~ +50°C
R2	-10°C ~ +60°C
R3	-10°C ~ +70°C
R4	-20°C ~ +70°C
R5	-30°C ~ +80°C
R6	-40°C ~ +85°C
R7	-5°C ~ +55°C
RC	Custom Temp.

Load Cap

##	Custom Load
S	Series

Aging

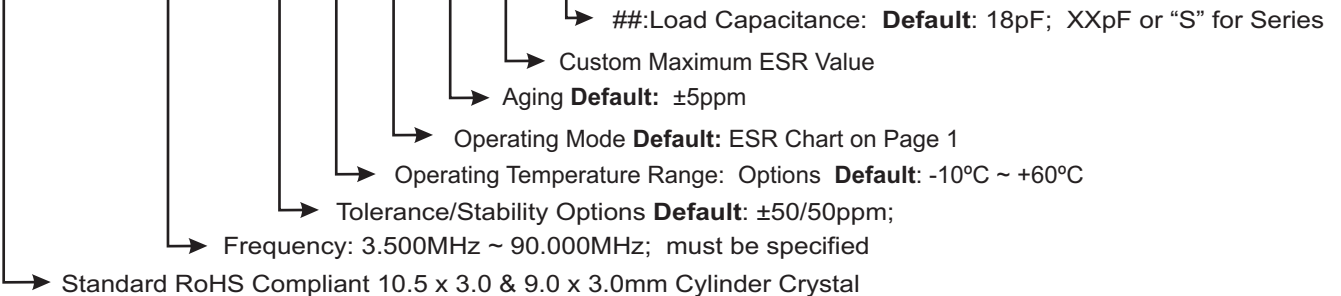
A1	1ppm/year Max
A3	3ppm/year Max
A4	4ppm/year Max
AC	Custom Aging

Mode

O3	AT-Cut 3rd O/T
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E.S.R

Z###	Cust. Max ESR
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Example: **C39R-3.87500M** 3.875MHz, ±50ppm 9.0 x 3.0mm fundamental Cylinder Xtal with ESR of 200Ω, operating at -10°C ~ +60°C

Example: **C39R-36.000M-C7R6O3-20** 36.000MHz, ±20/30ppm 10.5 x 3.0mm AT-Cut 3rd O.T. Cylinder Xtal with 20pF Load, ESR of 100Ω, operating at -40°C ~ +85°C

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

PLEASE CONTACT YOUR IMPACT SALES REPRESENTATIVE FOR CUSTOM SPECIFICATIONS, CURRENT INFORMATION, PRICING AND AVAILABILITY.

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