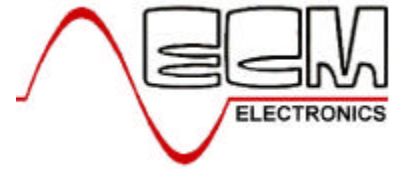


# ECM Surface Mount Crystal

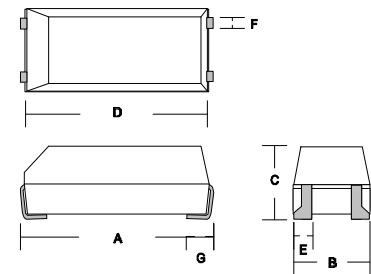


## ECM 90SMX & 91SMX

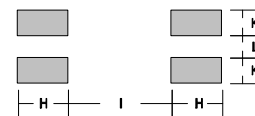
- High Density Mounting
- Excellent Shock Characteristics
- Competitive Prices For Volume Users
- Industry Standard Package
- Tape & Reel or Bulk Packaging



Parameter	90 & 91SMX
Frequency Range	32.768kHz
Calibration Tolerance @25°C	+/-20ppm +/-50ppm +/-100ppm
Temperature Tolerance	-0.4ppm/°C <sup>2</sup>
Operating Temperature	-40°C to +85°C
Storage Temp	-55°C to +125°C
Load Capacitance	6pf to ∞ (12.5pF Standard)
ESR	55KΩ max
Shunt Capacitance	1.0pF (Typ)
Drive Level	1.0μW
Shock Resistance	+/-5ppm max
Ageing	+/-5ppm /yr



LAND PATTERN

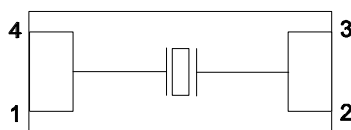


A	B	C	D	E	F	G
10.41	4.06	3.56	9.40	0.51	0.51	2.54

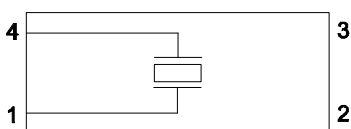
H	I	K	L
2.7	5.0	0.6	1.7

Dimensions in mm

### INTERNAL CONNECTION



91SMX



90SMX

ECM Electronics Limited, Penmaen House, Ashington, West Sussex, RH20 3JR, UK  
 Tel: +44(0)1903 892810: Fax: +44(0)1903 892738. Email: [ecm@ecmelectronics.co.uk](mailto:ecm@ecmelectronics.co.uk)

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