

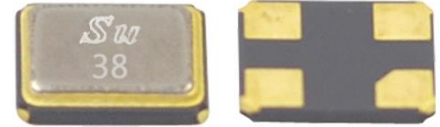
# TSQ-2016SMD

## FEATURES

The entire package can be grounded via the top metal lid and the two bottom pads

Small footprint. Ideal for space constrained applications

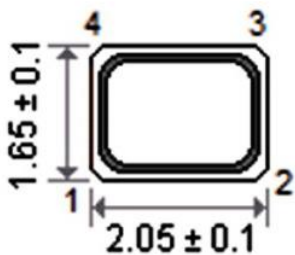
Exhibits extremely low aging with a high shock & vibration resistance



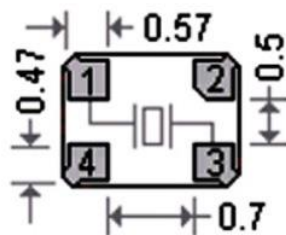
SPECIFICATIONS	
Holder Type	2.0x1.6mm Ceramic Surface Mount
Frequency Range	20MHz to 54MHz (Fund.)
Crystal Cut //Load Capacitance	AT – Cut // Series or Parallel (8 to 32pF) resonance
Drive Level	10μW typical (100μW max.)
Frequency Tolerance (ΔF)	±10ppm, ±20ppm or ±30ppm (max.) at 25°C
Aging	ΔF/F: ±3ppm / year (max.)
Storage Temperature Range	-50°C to 105°C

EQUIVALENT SERIES RESISTANCE (ESR)	
Frequency Range	ESR (Ω)
20.000MHz ≤ f < 23.900MHz	120max
24.000MHz ≤ f < 29.900MHz	100max
30.000MHz ≤ f < 37.900MHz	80max
38.000MHz ≤ f < 54.000MHz	60max

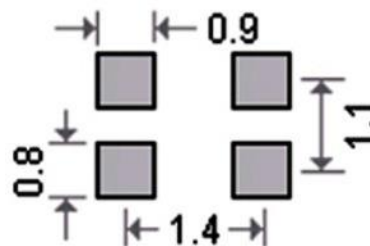
## Mechanical Dimensions Unit: mm



Top View



Bottom View



Suggested Layout



Pad Connections:  
Pad 1 and 3: Crystal  
Chamfered pad is pad No.2

Note: Specification are subject to change without notice. For more detail and update, please visit our website.