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## APPROVAL SHEET

CUSTOMER'S NAME : \_\_\_\_\_

MODEL NUMBER : SPK-16M-5032

16M 18PF 20PPM 5\*3.2

SPEC RECORD NUMBER : SPK-980114-001

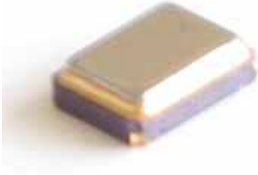
APPROVAL DATE : 2010-01-14

**Confirmed Signature:**

**Authorized Signature:**

## SPK-5032

**GENERAL SPECIFICATIONS**  
**Environmental Specification:**  
**Surface mount crystal**

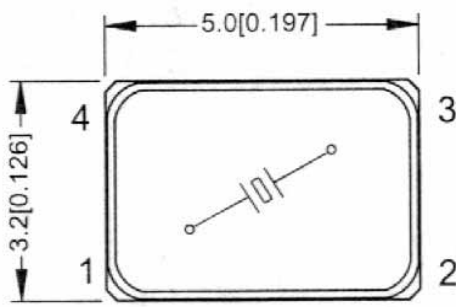


### 1.GENERAL SPECIFICATIONS

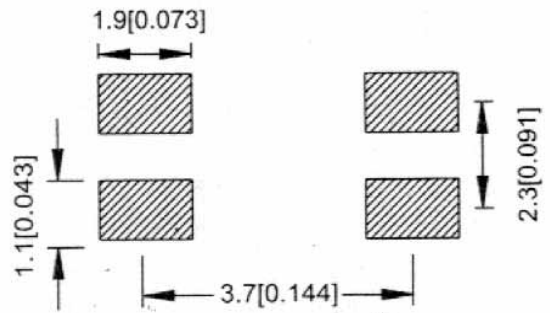
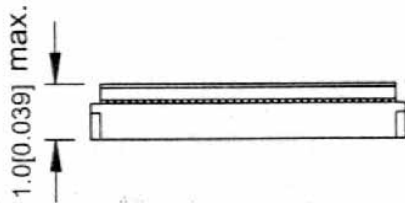
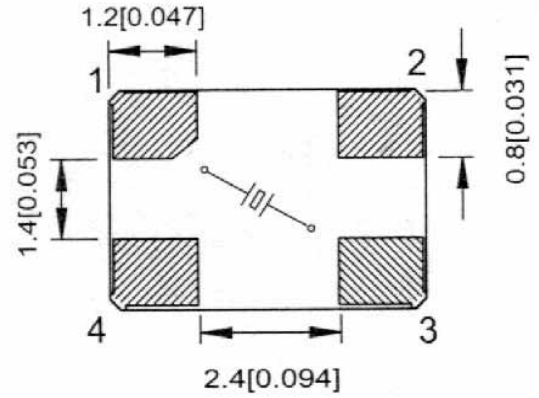
- 1.1 Holder Style : SPK-5032
- 1.2 Frequency : 16.000MHz
- 1.3 Mode Of Oscillation : Fundamental
- 1.4 Frequency tolerance at 25°C : +/- 20 PPM
- 1.5 Frequency Stability at (-20°C ~ +70°C) : +/- 20 PPM
- 1.6 Load Capacitance ( CL ) : 18pf
- 1.7 Static capacitance (CO) : 6PF max
- 1.8 Ts :
- 1.9 Resonance Resistance ( RR) : 40 Ω
- 1.10 Drive Level : 10 uW max
- 1.11 Insulation Resistance : 10M ohm MIN
- 1.12 Aging : +/-3ppm/year
- 1.13 Operating temperature : -20 °C ~ +70 °C
- 1.14 Measurement Condition : the reference temperature shall be at 25°C±2°C



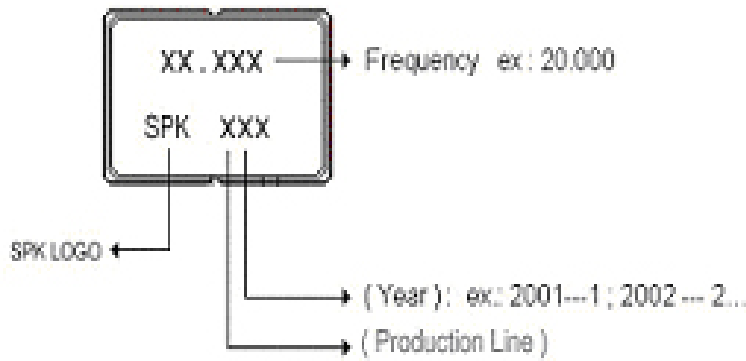
### 3.Dimension



Pad 1 and 3: Crystal  
 Pad 2 and 4: Metal lid and ground  
 Chamfered pad is pad No. 1

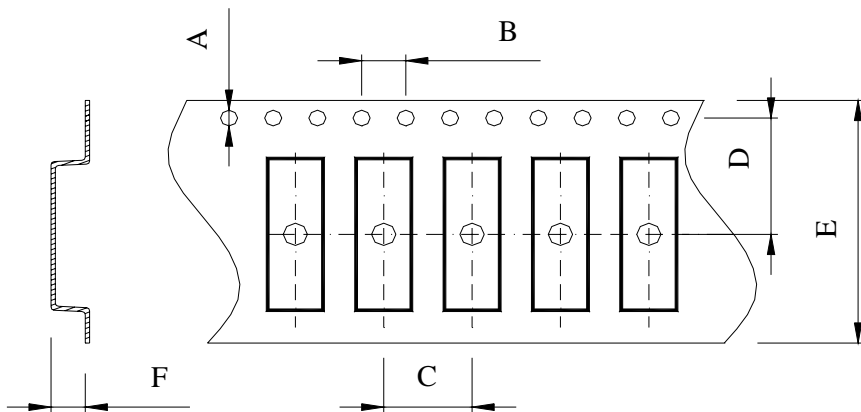


### 4. Marking: laser marking

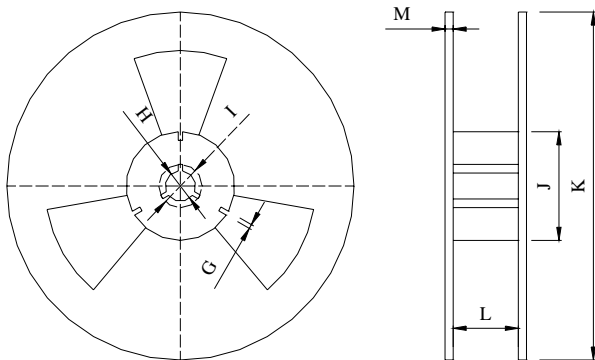


## 5. Package and Label

### 5.1 Package dimension: 1 REEL : 1000 PCS

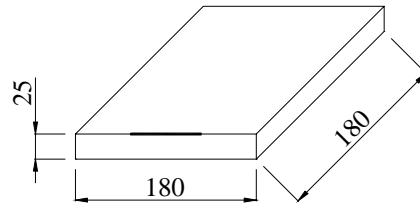
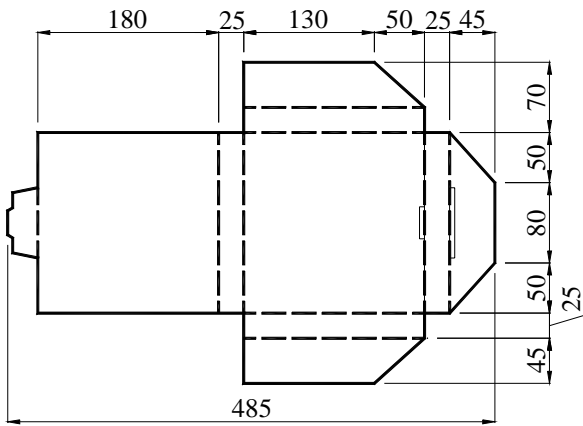


A	B	C	D	E	F
1.50	4.0	8.0	5.5	12.0	1.1

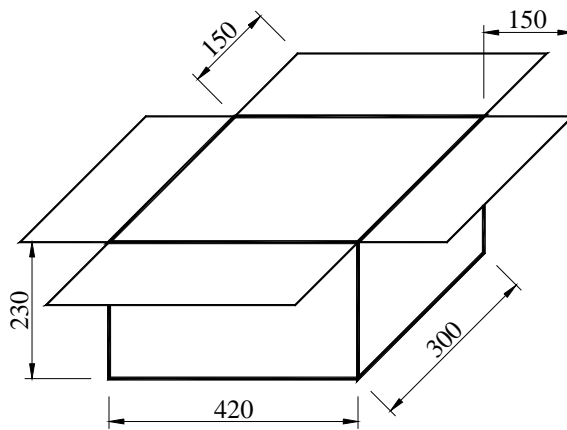
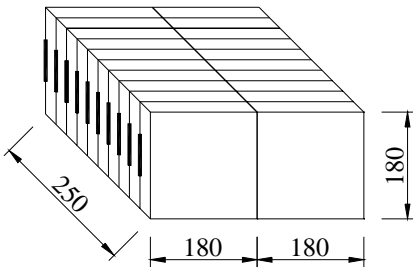


G	H	I	J	K	L	M
2.5	13.0+/-0.2	21.0+/-1	60	180	17.65	1.4

**.Carton Dimension (unit : mm)**



**1 reel = 1 Inner box**



**20 Inner boxes = 1 Carton**

**20kpcs = 1 Carton**