# 2.5 x 2.0 x 0.95 mm 32.768kHz CERAMIC SURFACE MOUNT CRYSTAL OSCILLATOR



### ASDK Series

#### **FEATURES:**

- 32.768kHz in 2.5 x 2.0 x 0.95mm package
- Seam sealed assure high reliability performance
- Low current consumption 1.0mA (Vdd=1.8V)
- Suitable for RoHS compliant reflow
- Extend temperature range available

### > **STANDARD SPECIFICATIONS:**

#### **APPLICATIONS:**

- Laptop
- Digital camera
- Wireless LAN
- Bluetooth and
- mobile communication
- LCD
  - PDA and MP3 player

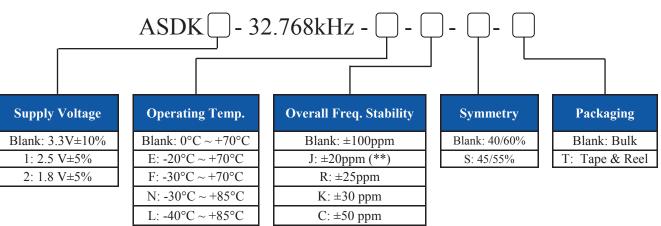
RoHS

Compliant

• Electricity, gas and water metering

Parameters		Minimum	Typical	Maximum	Units	Notes
Frequency Range			32.768		kHz	
Operating Temperature		0		+70	°C	See options
Storage Temperature		-55		+125	°C	
Overall Frequency Stability		-100		+100	ppm	See options
Supply Voltage (Vdd)		2.97	3.3	3.66	V	Standard
		2.375	2.5	2.625		Option 1
		1.71	1.8	1.89		Option 2
Supply Current (I <sub>dd</sub> )			1.0	1.5	mA	Vdd=1.8V
			1.2	2.5		Vdd=2.5V
			2.2	3.5		Vdd=3.3V
Output Load				15	pF	CMOS
Output Voltage	V <sub>OH</sub>	0.9*Vdd			V	
	V <sub>OL</sub>			0.1*Vdd		
Tri-state function		"1" ( $V_{IH} \ge 0.7*Vdd$ ) Open: Oscillation "0" ( $V_{IL} < 0.3*Vdd$ ) : Hi Z				
Aging		-3.0		+3.0	ppm	@+25°C First year
Symmetry @1/2Vdd		40	50	60	%	Standard
		45	50	55		Option S
Start-up Time			$\leq 2$	5	ms	
Rise/Fall Time (Tr/Tf)			43	50	ns	
Disable Current				10	μA	

#### • **OPTIONS AND PART IDENTIFICATION (Left blank if standard)**



\*Contact ABRACON for extended temperature rang \*\* For Temp option E, F, N and 0° C to + 70° C only



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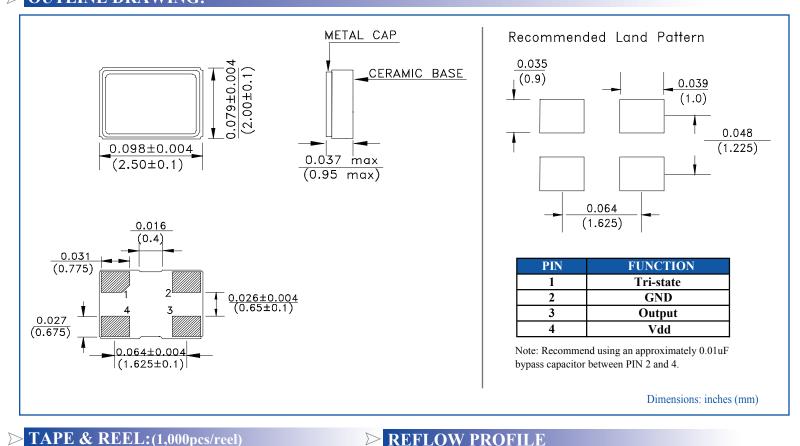
2.5 x 2.0 x 0.95 mm

RoHS

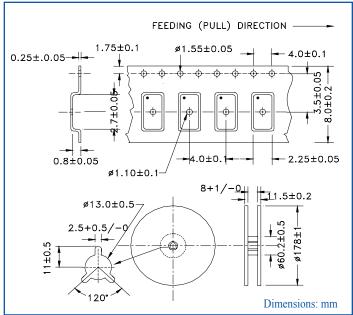
Compliant

# **OUTLINE DRAWING:**

**ASDK** Series



### **TAPE & REEL:**(1,000pcs/reel)



#### 3 Тр Critical Zone TLtoTp Temperatu Ramp Do 2 1 t 25°C to Peak Time Description Temperature Time Zone Preheat $1_{\text{SMEN}} \sim 1_{\text{SMAX}}$ 150°C ~ 180°C 60~120 sec 1 Т<sub>L</sub> 230°С Reflow 30 ~ 40 sec Т<sub>р</sub> 260°С Peak Heat 10 sec. MAX

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Need a test socket for the ASDK Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, click here. AXS-2520-04-07

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