

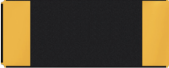


**THE DATASHEET OF
ABS06-32.768KHZ-1-T**



32.768kHz SMD CRYSTAL

ABS06



2.0 x 1.2 x 0.6mm

ABS06



RoHS/RoHS II Compliant

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable

FEATURES:

- Ceramic package offers excellent environmental & heat resistance
- Extended temperature -55°C to +125°C for industrial applications

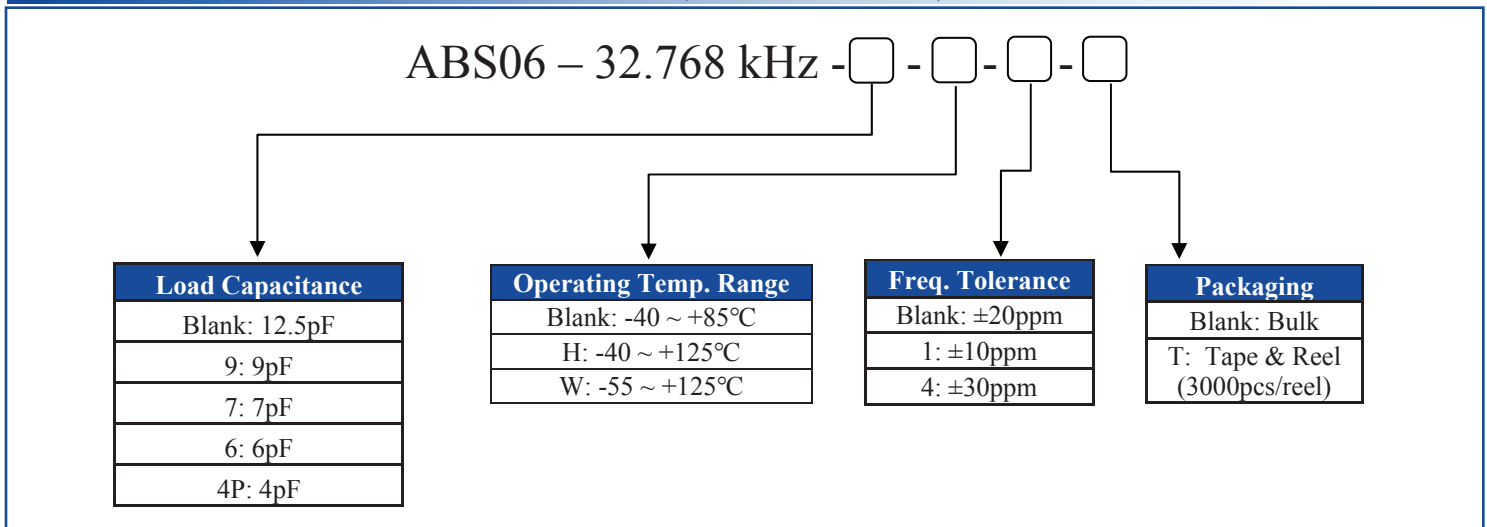
APPLICATIONS:

- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Wireless communications

STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency		32.768		kHz	
Operation Mode	Flexural Mode (Tuning Fork)				
Operating Temperature	-40		+85	°C	
Storage Temperature	-55		+125	°C	
Frequency Tolerance @+25°C	-20		+20	ppm	See options Tested at 0.5uW
Temperature Coefficient:	-0.04	-0.03	-0.02	ppm/T ²	
Turn-over temperature:	+20	+25	+30	°C	
Equivalent series resistance (R1)			90	kΩ	For -40 ~ +85°C option
			110	kΩ	For -40 ~ +125°C option & -55 ~ +125°C option
Load capacitance (CL)		12.5		pF	See options
Drive Level		0.1	0.5	μW	
Q value	9000				
Aging@25°C±3°C	-3		3	ppm	First year
Insulation Resistance	500			MΩ	@ 100Vdc ± 15V

OPTIONS AND PART IDENTIFICATION: (Left blank if standard)



32.768kHz SMD CRYSTAL

ABS06

ABS06

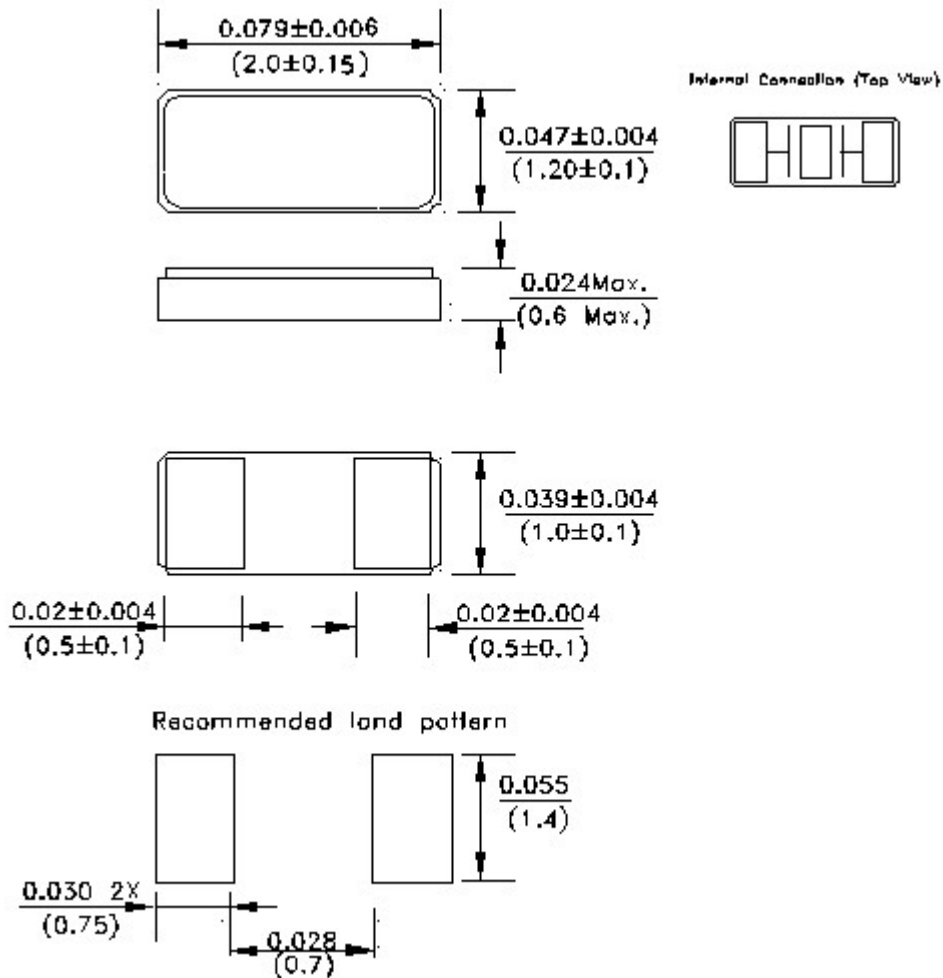


RoHS/RoHS II Compliant



2.0 x 1.2 x 0.6mm

OUTLINE DRAWING:



Dimensions: inches (mm)

Notes:

- Chamfer not shown.
- Due to material availability, the outline and finish color of the component may vary. This variation in no way affects the electrical performance of the product.

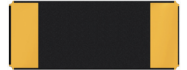
32.768kHz SMD CRYSTAL

ABS06

ABS06



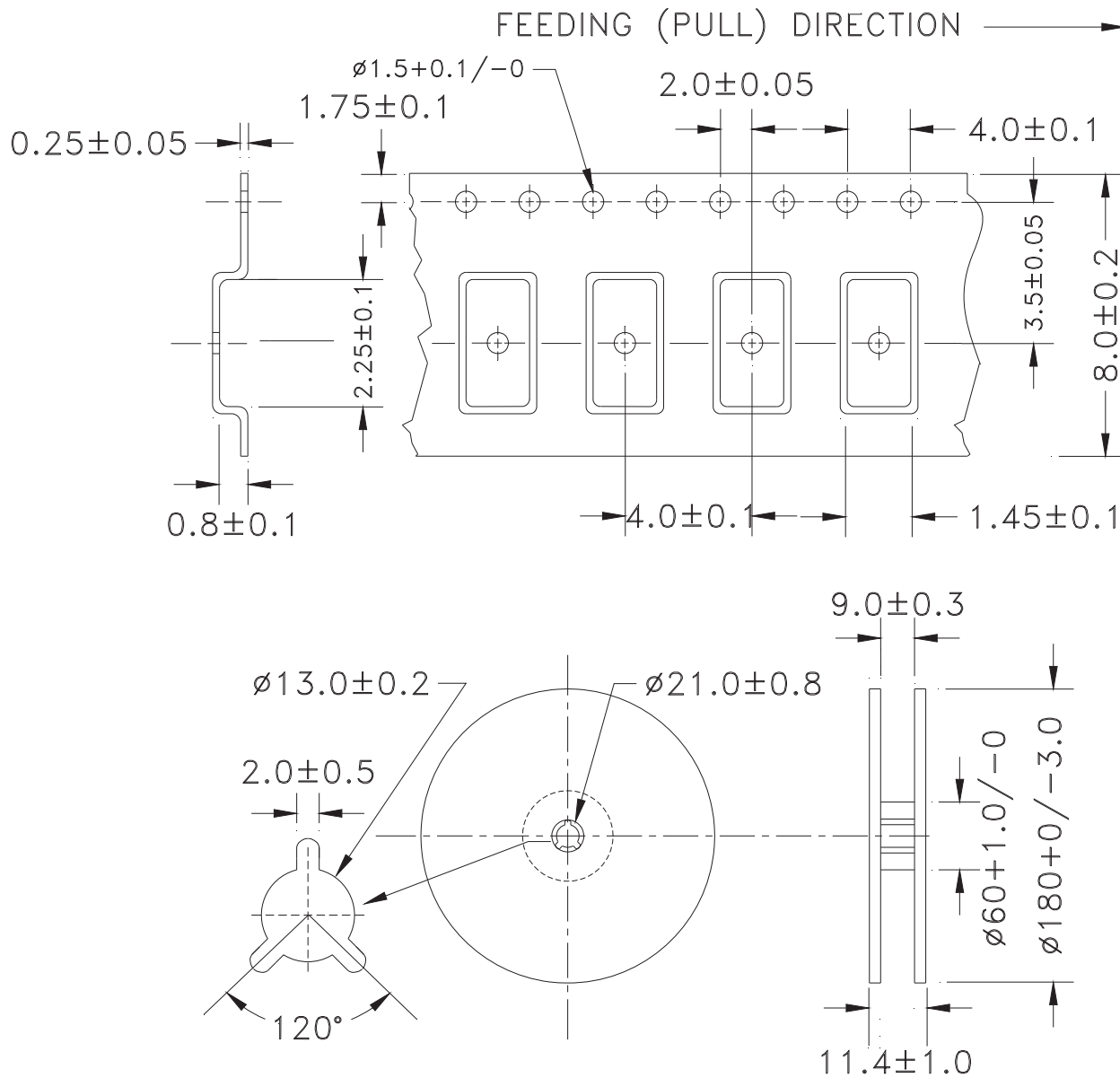
RoHS/RoHS II Compliant



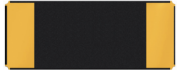
2.0 x 1.2 x 0.6mm

TAPE & REEL:

T=Tape and reel (3,000pcs/reel)



Dimensions: mm



RECOMMENDED REFLOW PROFILE: [JDEC J-STD-020]

Reflow Profile [JDEC J-STD-020]

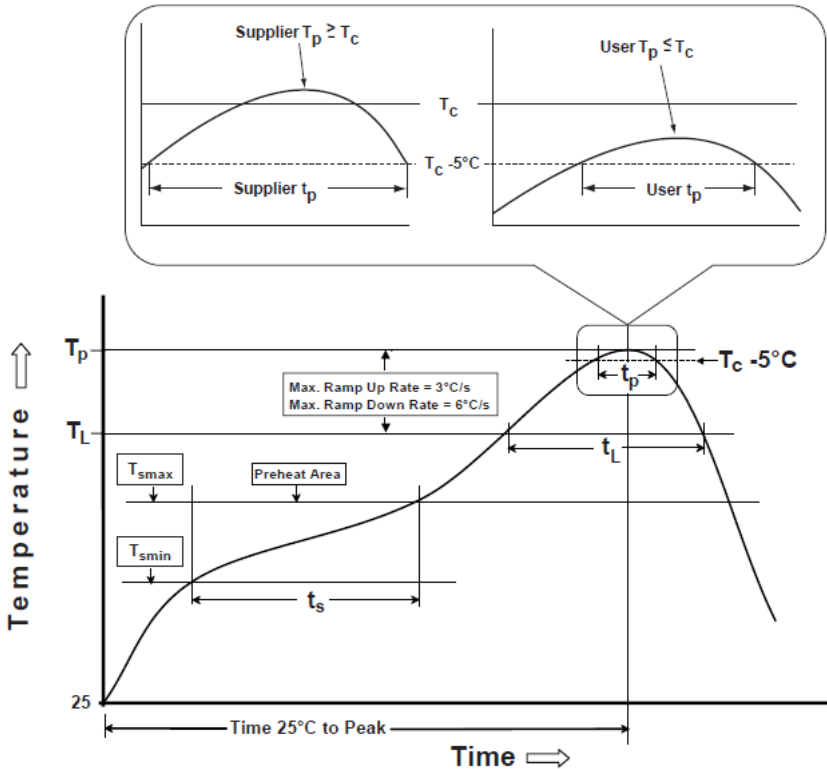


Table 1

SnPb Eutectic Process Classification Temperatures (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ ≥350
<2.5 mm	235 °C	220 °C
≥2.5 mm	220 °C	220 °C

Table 2

Pb-Free Process Classification Temperatures (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
<1.6 mm	260 °C	260 °C	260 °C
1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
>2.5 mm	250 °C	245 °C	245 °C

Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Preheat / soak		
Temperature minimum (T_{smin})	100°C	150°C
Temperature maximum (T_{smax})	150°C	200°C
Time (T_{smin} to T_{smax}) (t_s)	60 - 120 sec.	60 - 120 sec.
Average ramp-up rate (T_{smax} to T_p)	3°C/sec. max	3°C/sec. max
Liquidous temperature (T_L)	183°C	217°C
Time at liquidous (t_L)	60 - 150 sec.	60 - 150 sec.
Peak package body temperature (T_p)*	<i>see Table 1</i>	<i>see Table 2</i>
Time (t_p)** within 5°C of the specified classification temperature (T_c)	20 sec.	30 sec.
Ramp-down rate (T_p to T_{smax})	6°C/sec. max	6°C/sec. max
Time 25°C to peak temperature	6 min. max	8 min. max

*Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

**Tolerance for time at peak profile temperature (t_p) is defined as supplier minimum and a user maximum.

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View ABS06-32.768KHZ-1-T on WIN SOURCE](#)

 [Abracon LLC Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management