32.768kHz SMD CRYSTAL

ABS06





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

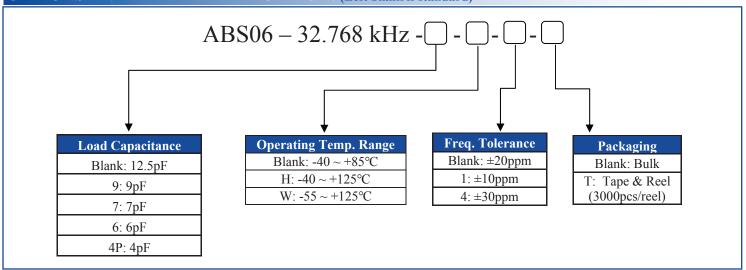
APPLICATIONS:

- 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/T²	
Turn-over temperature:	+20	+25	+30	°C	
Equivalent series resistance (R1)			90	kΩ	For -40 ~ +85°C option
			110	kΩ	For -40 \sim +125°C option & -55 \sim +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			ΜΩ	@ $100 \text{Vdc} \pm 15 \text{V}$

> OPTIONS AND PART IDENTIFICATION: (Left blank if standard)



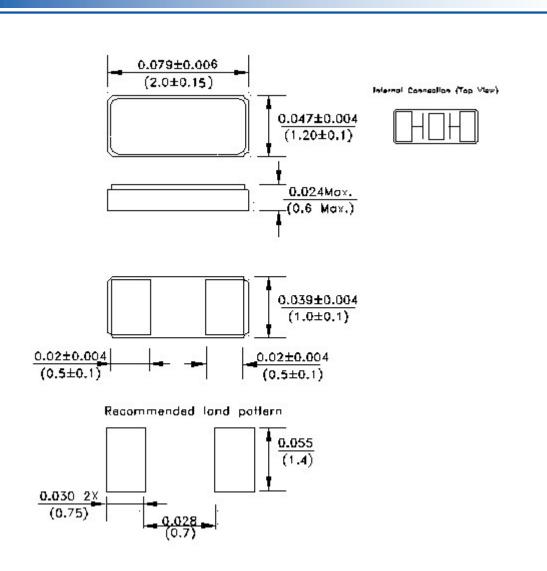


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OUTLINE DRAWING:



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.



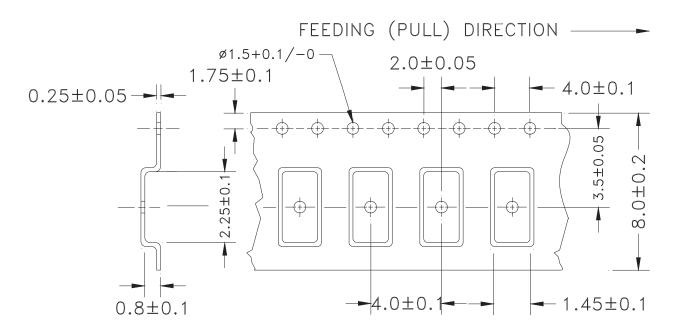
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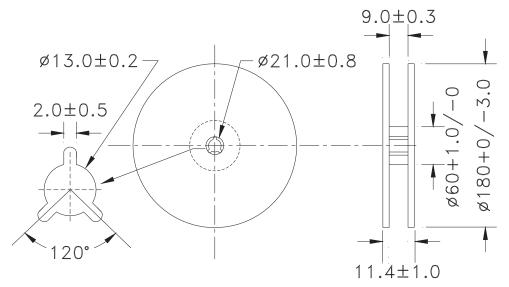




► TAPE & REEL:

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





Dimensions: mm



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Temperature

ΤL





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

Reflow Profile [JDEC J-STD-020]

Time 25°C to Peak

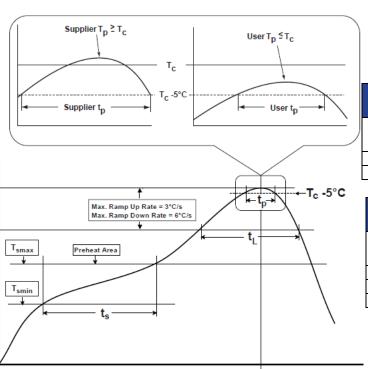


Table 1

SnPb Eutectic Process Classification Temperatures (Tc)						
Package Thickness	Volume mm³ <350	Volume mm³ ≥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 $(T_{smin} \text{ to } T_{smax})$ (t_s)	60 - 120 sec.	60 - 120 sec.
Average ramp-up rate $(T_{smax} \text{ to } T_P)$	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)*	see Table 1	see Table 2
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 (TP) is defined as a supplier minimum and a user maximum.

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

单击下面可查看定价,库存,交付和生命周期等信息

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