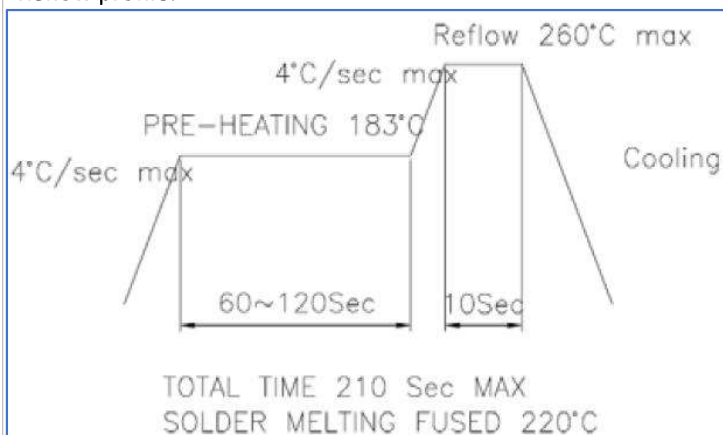


ECN/PCN No.: 3729

For Manufacturer			
<b>Product Description:</b> Low Jitter Crystal Oscillator	<b>Abracón Part Number / Part Series:</b> ABLJO	<input checked="" type="checkbox"/> Documentation only	<input checked="" type="checkbox"/> Series
		<input checked="" type="checkbox"/> ECN	<input type="checkbox"/> Part Number
		<input type="checkbox"/> EOL	
<b>Affected Revision:</b> D	<b>New Revision:</b> E	<b>Application:</b>	<input type="checkbox"/> Safety
			<input checked="" type="checkbox"/> Non-Safety

**Prior to Change:**

Reflow profile:



**After Change:**

Reflow profile:

**Table 1**  
SnPb Eutectic Process  
Classification Temperatures (T<sub>c</sub>)

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

**Table 2**  
Pb-Free Process  
Classification Temperatures (T<sub>c</sub>)

Package Thickness	Volume mm <sup>3</sup> <350	Volume mm <sup>3</sup> 350-2000	Volume mm <sup>3</sup> >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 <sub>smin</sub> )	100°C	150°C
Temperature maximum (T <sub>smax</sub> )	150°C	200°C
Time (T <sub>smin</sub> to T <sub>smax</sub> ) (t <sub>s</sub> )	60 - 120 sec.	60 - 120 sec.
Average ramp-up rate (T <sub>smin</sub> to T <sub>smax</sub> )	3°C/sec. max	3°C/sec. max
Liquidous temperature (T <sub>L</sub> )	183°C	217°C
Time at liquidous (t <sub>L</sub> )	60 - 150 sec.	60 - 150 sec.
Peak package body temperature (T <sub>p</sub> )*	see Table 1	see Table 2
Time (t <sub>p</sub> )** within 5°C of the specified classification temperature (T <sub>c</sub> )	20 sec.	30 sec.
Ramp-down rate (T <sub>p</sub> to T <sub>smax</sub> )	6°C/sec. max	6°C/sec. max
Time 25°C to peak temperature	6 min. max	8 min. max
Reflow cycles	2 max	2 max

\*Tolerance for peak profile temperature (T<sub>p</sub>) is defined as a supplier minimum and a user maximum.  
\*\*Tolerance for time at peak profile temperature (t<sub>p</sub>) is defined as a supplier minimum and a user maximum.

<b>Cause/Reason for Change:</b> Updated reflow profile to JEDEC J-STD-020.		
<b>Change Plan</b>		
<b>Effective Date:</b> 09/01/2022	<b>Additional Remarks:</b> n/a	
<b>Change Declaration:</b> The changes attached do not negatively impact electrical or mechanical performance of this series.		
<b>Issued Date:</b> 09/01/2022	<b>Issued By:</b>	<b>Issued Department:</b>
<b>Approval:</b>	<b>Approval:</b>	<b>Approval:</b>
<b>For Abracon EOL only</b>		
<b>Last Time Buy (if applicable):</b> n/a	<b>Alternate Part Number / Part Series:</b> n/a	
<b>Additional Approval:</b> n/a	<b>Additional Approval:</b> n/a	<b>Additional Approval:</b> n/a
<b>Customer Approval (If Applicable)</b>		
<b>Qualification Status:</b> <div style="text-align: center;"><input type="checkbox"/> Approved <input type="checkbox"/> Not accepted</div> <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>		
<b>Customer Part Number:</b>		<b>Customer Project:</b>
<b>Company Name:</b>	<b>Company Representative:</b>	<b>Representative Signature:</b>
<b>Customer Remarks:</b>		