

For use with IDT's VCXO-based Synchronization PLLs

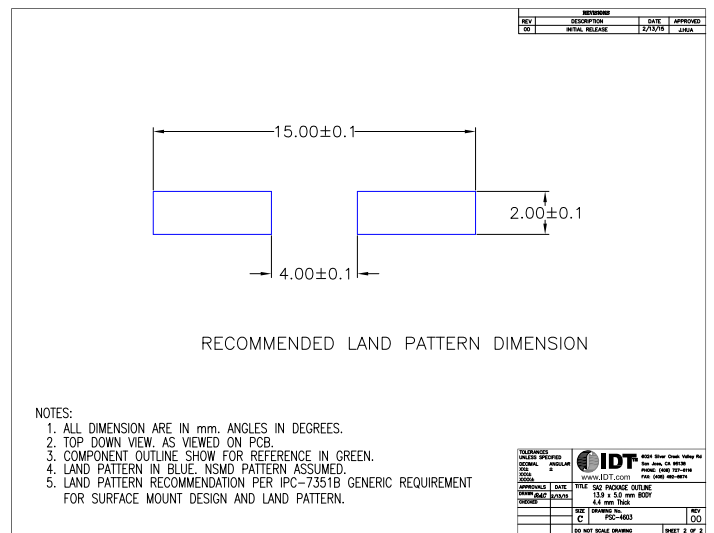
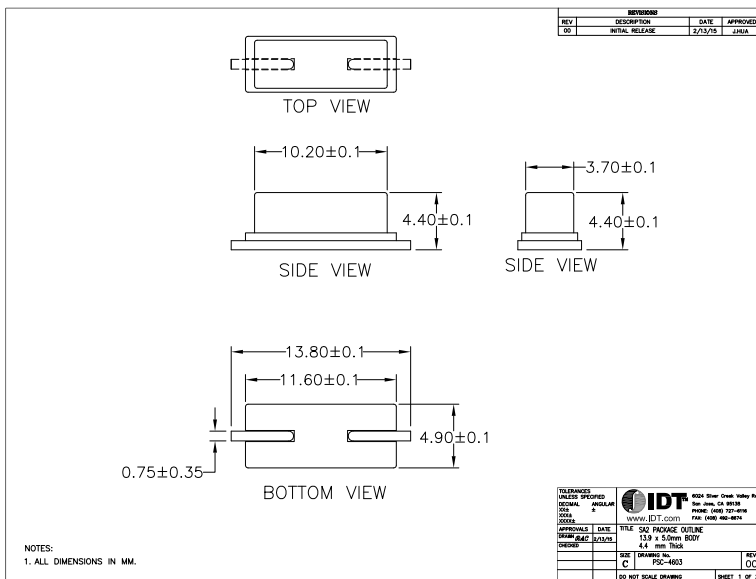
DATASHEET

Specifications

Parameters	Ratings/Units
Frequency	25.000 MHz
Resonance Mode	Fundamental
Frequency Tolerance @ 25°C	±20 PPM
Frequency Stability, ref @ 25°C Over Operating Temperature Range	±20 PPM
Temperature Range Operating (TOPR)	-40°C ~ +85°C
Temperature Range, Storage (TSTG)	-40°C ~ +85°C
Equivalent Series Resistance (ESR)	40 Ohms
Shunt Capacitance (Co)	4.0 pF
Pullability (C0 / C1)	270
Load Capacitance (CL)	10 pF
Drive Level	1.0 mW
Aging per year	±3 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish (96.5% - 3% - 0.5%)	Sn - Ag - Cu
Weight (TYP)	649 mg

Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary. The above specifications, having been carefully prepared and checked, is believed to be accurate at the time of publication; however, no responsibility is assumed by IDT for inaccuracies. All specifications subject to change without notice.

Package Outline and Dimensions (SA2)



## Ordering Information

<b>Part / Order Number</b>	<b>Shipping Packaging</b>	<b>Package</b>	<b>Temperature</b>
278-25-336SA2I	Cut-Tape	13.9 x 5.0 x 4.4 mm SA2	-40° to +85°
278-25-336SA2I8	Tape and Reel	13.9 x 5.0 x 4.4 mm SA2	-40° to +85°

## IMPORTANT NOTICE AND DISCLAIMER

RENESAS ELECTRONICS CORPORATION AND ITS SUBSIDIARIES (“RENESAS”) PROVIDES TECHNICAL SPECIFICATIONS AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES “AS IS” AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD-PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for developers who are designing with Renesas products. You are solely responsible for (1) selecting the appropriate products for your application, (2) designing, validating, and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. Renesas grants you permission to use these resources only to develop an application that uses Renesas products. Other reproduction or use of these resources is strictly prohibited. No license is granted to any other Renesas intellectual property or to any third-party intellectual property. Renesas disclaims responsibility for, and you will fully indemnify Renesas and its representatives against, any claims, damages, costs, losses, or liabilities arising from your use of these resources. Renesas' products are provided only subject to Renesas' Terms and Conditions of Sale or other applicable terms agreed to in writing. No use of any Renesas resources expands or otherwise alters any applicable warranties or warranty disclaimers for these products.

(Disclaimer Rev.1.01)

### Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,  
Koto-ku, Tokyo 135-0061, Japan  
[www.renesas.com](http://www.renesas.com)

### Trademarks

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.

### Contact Information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit [www.renesas.com/contact-us/](http://www.renesas.com/contact-us/).