

Specifications

Parameters	Ratings/Units
Frequency	12.8 MHz
Frequency Stability: Over-ALL Effects (Including 20 years Aging ¹) Over Temperature Range (TOPR)	±4.6 PPM Max ±0.28 PPM Max
Temperature Range: Operating (TOPR) Storage (TSTG)	-40°C ~ +85°C -55°C ~ +125°C
Supply Voltage (VDD)	3.3 V ±5%
Input Current (IDD)	6 mA Max
Output Load (HCMOS) (VOL)	15 pF Max
Rise Time (10% ~ 90% VDD) (TR)	5 nS
Fall Time (90% ~ 10% VDD) (TF)	5 nS
Symmetry (@ 50% VDD)	45% / 55%
Output Voltage (HCMOS) (VOL) (VOH)	10% VDD Max 90% VDD Max
Output Current (HCMOS) (IOL) (IOH)	6 mA Min -6 mA Min
Phase Noise: @ 100 Hz offset @ 1 kHz offset @ 10 kHz offset	-120 dBc/Hz (TYP) -140 dBc/Hz (TYP) -148 dBc/Hz (TYP)
Startup Time (Ts)	2 mS Max
Aging per year @ 25°C	±1 PPM Max
Maximum Soldering Temperature / Time	260°C / 10 seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au

¹ Inclusive of initial frequency tolerance, operating temperature range, 20 years Aging, input voltage change, load change, shock and vibration.

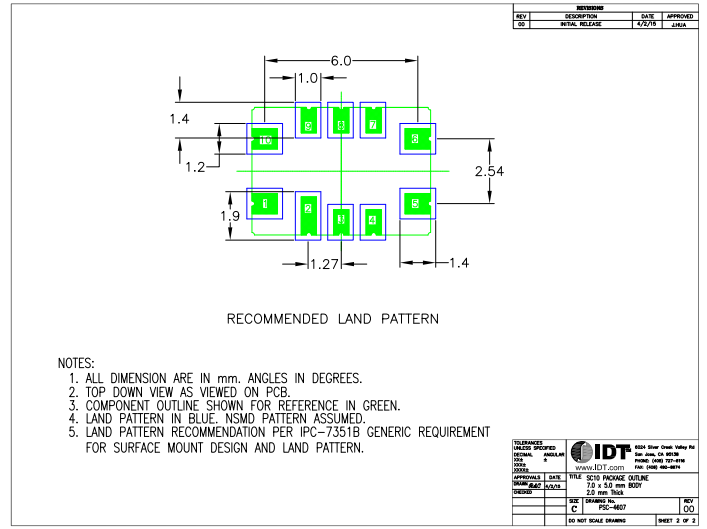
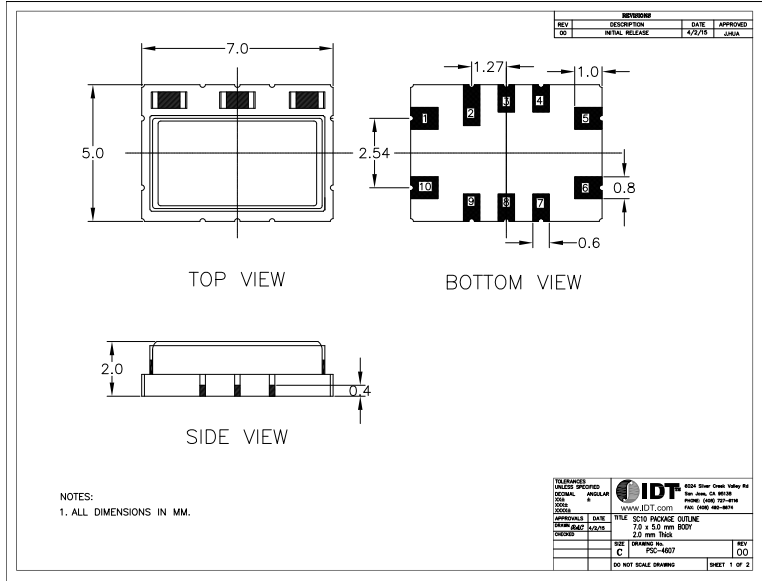
Enable/Disable Function ²	
Pin 9	Output (Pin 6)
Open	Active
'1' Level VIH ≥ 70%VDD	Active
'0' Level VIH ≤ 30%VDD	High Z

² An internal pullup resistance from pin 9 to pin 10 allows active output if pin 9 is left open.

Note: 0.01µF bypass capacitor should be placed between VDD (Pin 10) and GND (Pin 5) to minimize power supply line noise.

Note: 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. Dimensional drawing below is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary.

Package Outline and Dimensions (SC10)



Pin Assignments

Pin Number	Description	Pin Number	Description
1	N.C.	6	RFOUT
2	N.C.	7	N.C.
3	N.C.	8	N.C.
4	N.C.	9	E/D
5	GND	10	VDD

Ordering Information

Part / Order Number	Shipping Packaging	Package	Temperature
822AR-12.8-2SC10I	Cut-Tape	7.0 x 5.0 x 2.0 mm SC10	-40° to +85°
822AR-12.8-2SC10I8	Tape and Reel	7.0 x 5.0 x 2.0 mm SC10	-40° to +85°

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Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

Contact Information

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