

DATASHEET

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	
	perating (TOPR) prage (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) (Voн)	10% VDD Max 90% VDD Max	
Output Current (HCMOS)	(IOL) (IOH)	6 mA Min -6 mA Min	
@	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			

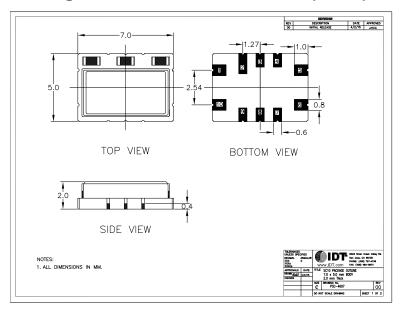
² An internal pullup resistance from pin 9 to pin 10 allows active output if pin 9 is left open.

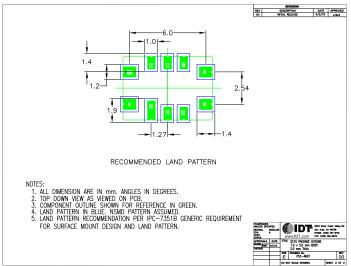
Note: 0.01µF bypass capacitor should be placed between VDD (Pin 10) and GND (Pin 5) to minimize power supply line noise.

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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