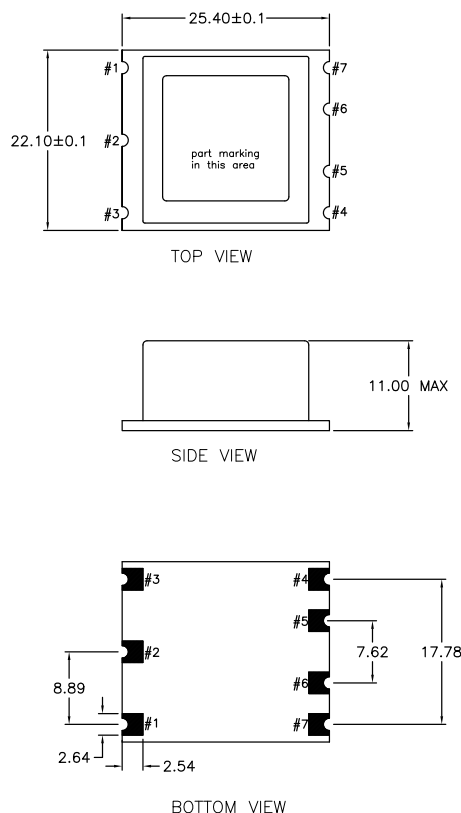


Specifications


Parameters	Ratings/Units
Frequency (Fo)	12.800000 MHz
Frequency Stability vs.: Operating Temperature (TOPR) Change of VDD (±5%)	±10 ppb (0.010ppm) ±0.5 ppb (0.0005ppm)
Temperature Range: Operating (TOPR) Storage (TSTG)	-40°C ~ +85°C -40°C ~ +85°C
Supply Voltage (VDD)	3.3VDC ±5%
Output Load (HCMOS)	15 pF ±1 pF
Output Voltage (VOL) (VOH) Spurious Rise Time (TR) (10% ~ 90% VDD) Rise Time (TF) (90% ~ 10% VDD) Symmetry	0.1V Typ, 0.4V Max 3.3V Typ, 2.8V Min -60dBc Max 5 nS Max 5 nS Max 45% / 55%
Frequency Control Slope Pin #2 Reference (VREF into 9k Min) Frequency Change (ΔF) Non-Linearity (0.8V to VDD) Voltage Control (Vc) Input Impedance (ZIN)	Positive 2.8 ±0.1VDC ±0.5 ppm Min. ±10 % 0V to 2.8V 100K Ohm Min.
Warm-Up: Time (to ±10 ppb) (Referenced to Fo @ 60min after turn-on) Warm-Up Current Operating Power	5 Minutes 1000mA Max 1.2 W Max at 25°C
Aging: Short-term Aging (1 st 45 days) 1 st year Aging (after 45 days) Long Term (10-years ALL effects) Allen Variance (1 sec samples)	±0.5 ppb / day Max ±50 ppb ±0.4 PPM Max <50 x 10 ⁻¹² / Sec
Phase Noise: @ 1 Hz Offset: @ 10 Hz Offset: @ 100 Hz Offset: @ 1 kHz Offset: @ 10 kHz Offset:	-95 dBc/Hz Typ -120 dBc/Hz Typ -135 dBc/Hz Typ -145 dBc/Hz Typ -155 dBc/Hz Typ
Moisture Sensitivity Level (MSL)	1
Termination Finish	Immersion Gold
Weight (Typ)	5.7 g

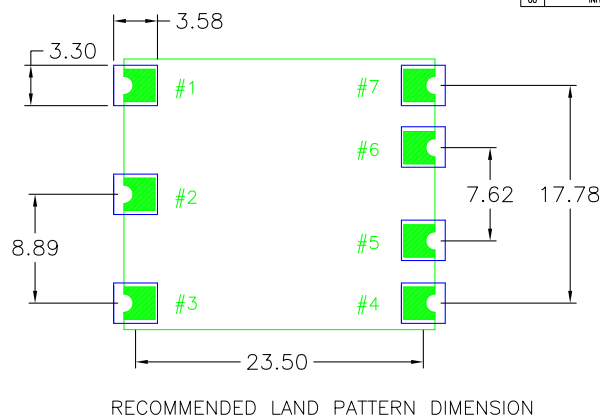
Package Outline and Dimensions (SC7)



NOTES:
1. ALL DIMENSIONS IN MM.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	2/13/15	J.HUA

TOLERANCES UNLESS SPECIFIED		 6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 727-6116 FAX: (408) 492-8674	
DECIMAL	ANGULAR		
XXX±	±	www.IDT.com	
XXXX±			
XXXX±			
APPROVALS	DATE	TITLE SC7 PACKAGE OUTLINE	
DRAWN: JAC	2/13/15	25.4 x 22.1 mm BODY	
CHECKED		11.0 mm Thick	
		SIZE C	DRAWING No. PSC-4601
			REV 00
		DO NOT SCALE DRAWING	SHEET 1 OF 2



NOTES:
1. ALL DIMENSION ARE IN mm. ANGLES IN DEGREES.
2. TOP DOWN VIEW. AS VIEWED ON PCB.
3. COMPONENT OUTLINE SHOW FOR REFERENCE IN GREEN.
4. LAND PATTERN IN BLUE. NSMD PATTERN ASSUMED.
5. LAND PATTERN RECOMMENDATION PER IPC-7351B GENERIC REQUIREMENT FOR SURFACE MOUNT DESIGN AND LAND PATTERN.

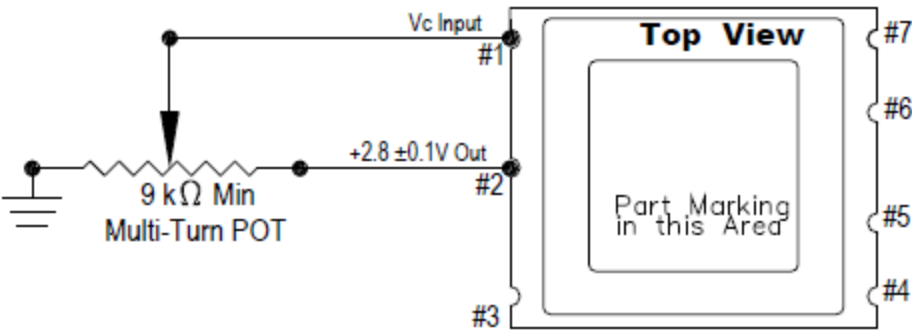
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	2/13/15	J.HUA

TOLERANCES UNLESS SPECIFIED		 6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 727-6116 FAX: (408) 492-8674	
DECIMAL	ANGULAR		
XXX±	±	www.IDT.com	
XXXX±			
XXXX±			
APPROVALS	DATE	TITLE SC7 PACKAGE OUTLINE	
DRAWN: JAC	2/13/15	25.4 x 22.1 mm BODY	
CHECKED		11.0 mm Thick	
		SIZE C	DRAWING No. PSC-4601
			REV 00
		DO NOT SCALE DRAWING	SHEET 2 OF 2

Pin Connections

Pin Number	Description
1	VC
2	VREF
3	VDD
4	RF Output
5	No connect
6	No connect
7	GND/Case
Metal Cover	Nickel-Silver

Recommended Vc Adjustment Circuit



Ordering Information

Part / Order Number	Shipping Packaging	Package	Temperature
845-12.8-1SC7I	Cut-Tape	25.4 x 22.1 x 11.0 mm SC7	-40 to +85 °C
845-12.8-1SC7I8	Tape and Reel	25.4 x 22.1 x 11.0 mm SC7	-40 to +85 °C

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