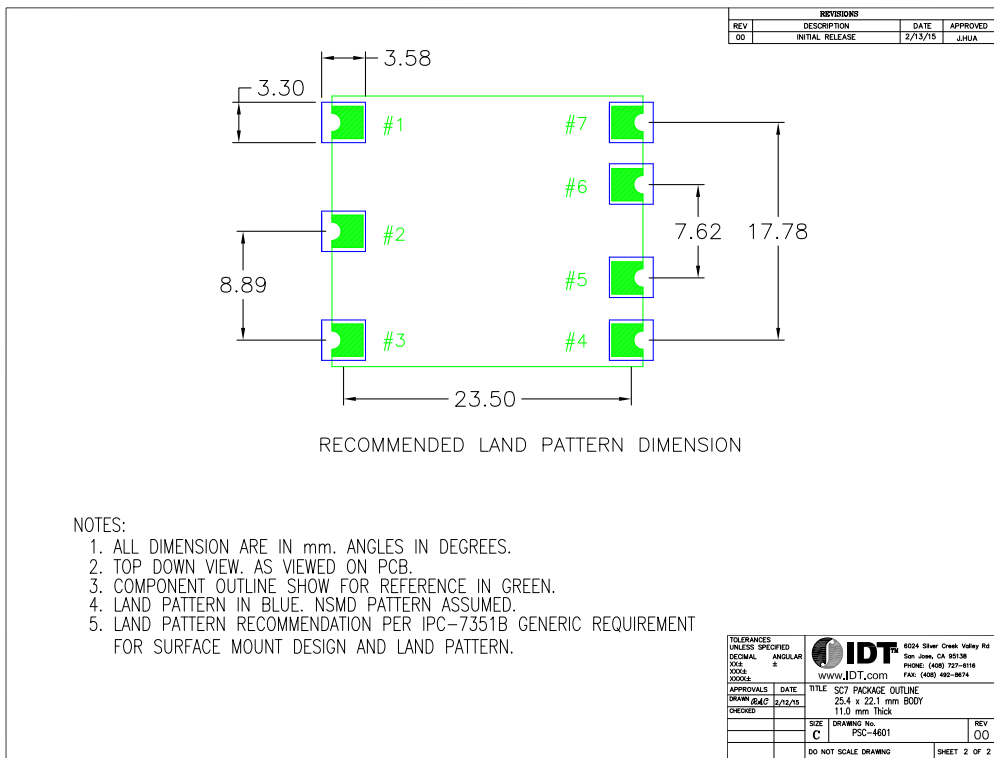
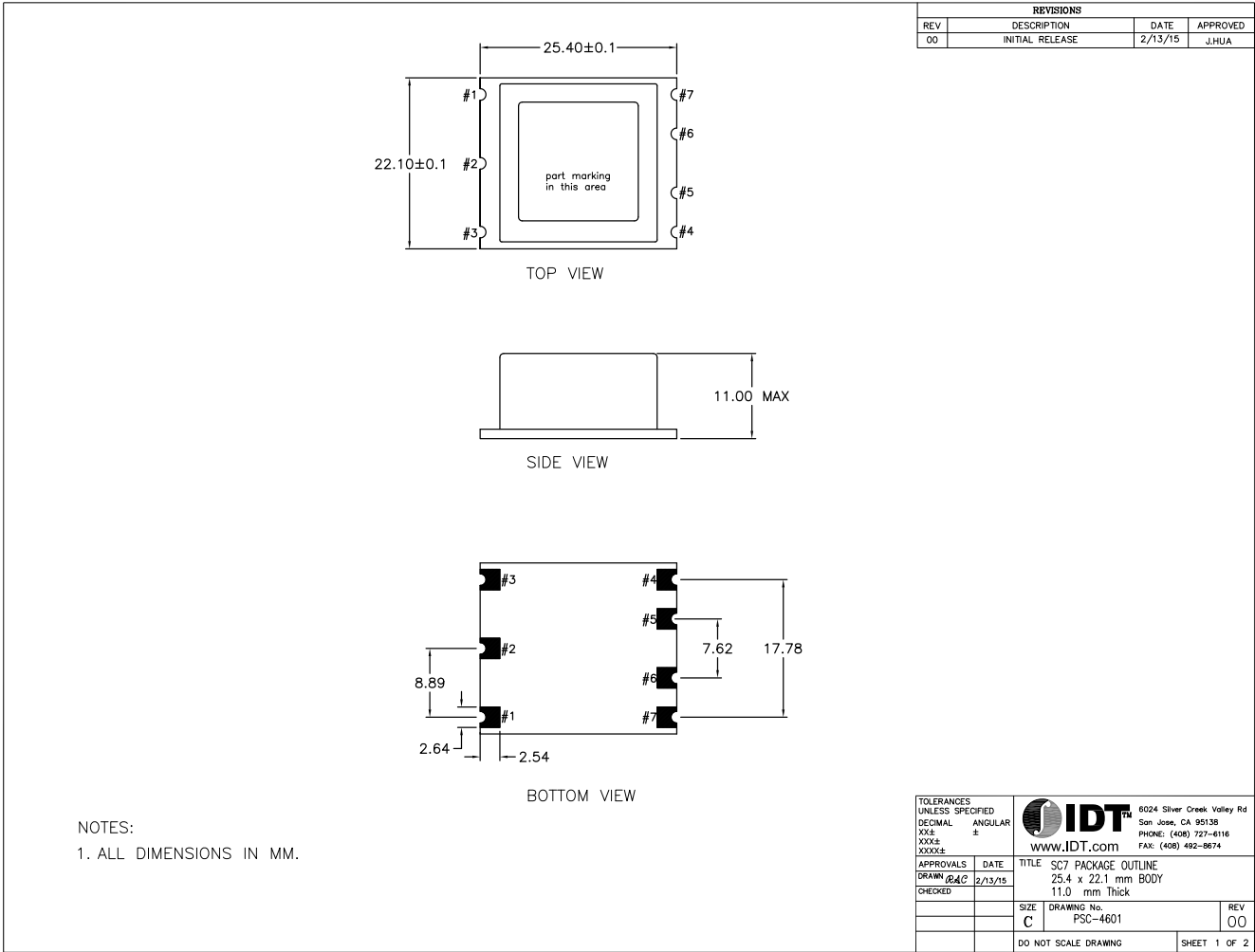


## Specifications

Parameters	Ratings/Units
<b>Frequency (Fo)</b>	12.800000 MHz
<b>Frequency Stability vs.:</b> Operating Temperature (TOPR) Change of VDD ( $\pm 5\%$ )	$\pm 10$ ppb (0.010ppm) $\pm 0.5$ ppb (0.0005ppm)
<b>Temperature Range:</b> Operating (TOPR) Storage (TSTG)	-40°C ~ +85°C -40°C ~ +85°C
<b>Supply Voltage (VDD)</b>	3.3VDC $\pm 5\%$
<b>Output Load (HCMOS)</b>	15 pF $\pm 1$ pF
<b>Output Voltage</b> (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%
<b>Frequency Control</b> Slope Pin #2 Reference (VREF into 9k Min) Frequency Change ( $\Delta F$ ) Non-Linearity (0.8V to VDD) Voltage Control (Vc) Input Impedance (ZIN)	Positive 2.8 $\pm 0.1$ VDC $\pm 0.5$ ppm Min. $\pm 10$ % 0V to 2.8V 100K Ohm Min.
<b>Warm-Up:</b> Time (to $\pm 10$ ppb) (Referenced to Fo @ 60min after turn-on) Warm-Up Current Operating Power	5 Minutes  1000mA Max 1.2 W Max at 25°C
<b>Aging:</b> Short-term Aging (1 <sup>st</sup> 45 days) 1 <sup>st</sup> year Aging (after 45 days) Long Term (10-years ALL effects) Allen Variance (1 sec samples)	$\pm 0.5$ ppb / day Max $\pm 50$ ppb $\pm 0.4$ PPM Max $< 50 \times 10^{-12}$ / Sec
<b>Phase Noise:</b> @ 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
<b>Moisture Sensitivity Level (MSL)</b>	1
<b>Termination Finish</b>	Immersion Gold
<b>Weight (Typ)</b>	5.7 g

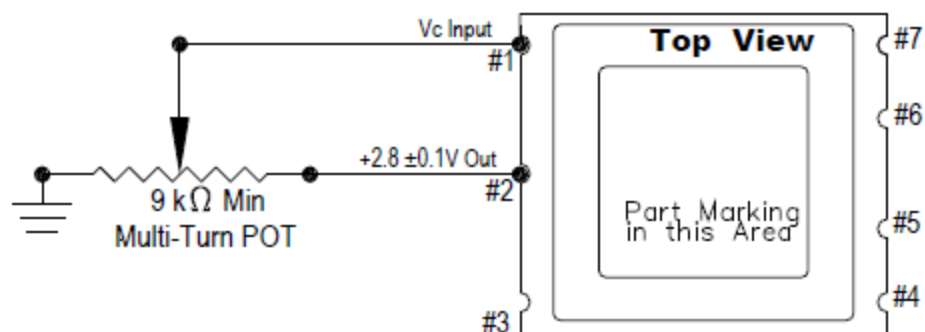
# Package Outline and Dimensions (SC7)



## 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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