



### Features and Benefits

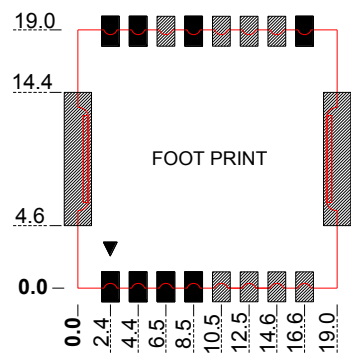
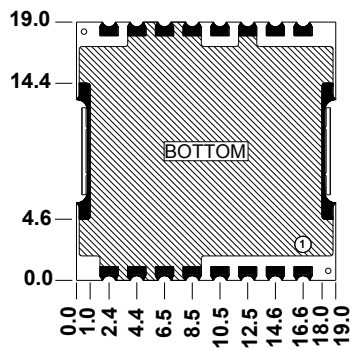
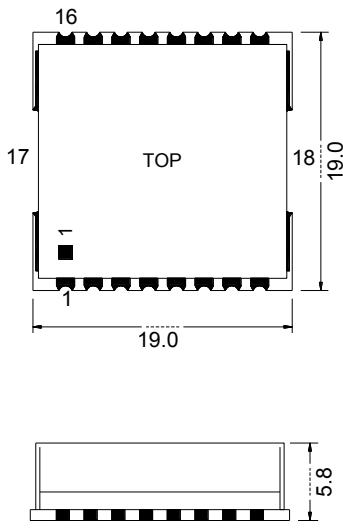
Frequency Range:523.5-543.5MHz  
Supply Voltage:5.0V  
Current: 30mA Max.  
3 wire serial integer PLL  
Output power: +2.0dBm Max.  
Phase noise: -108dBc/Hz@10KHz  
Operating temperature: -40°C--+85°C  
Size:19.0x19.0x5.8mm  
Package type: SMD

### Typical Applications

Base station  
Cable TV  
Satellite Communications  
UHF radio link

### Mechanical Drawing & Pin Connections

**Drawing No:** MD2400+&-1



#### Pin Connections:

Pin	Function
1	CLK
2	DATA
3	LE
4	Ref. IN
5-8	GND
9	VCC(VCO)
10-12	GND
13	RF Out
14	GND
15	Vcp(PLL)
16	Lock Detect
17&18	GND

Unit in mm  
1mm = 0.0394 inches



### Specifications

Parameter	Units	Min.	Typical	Max.
Operating Frequency Range	MHz	523.5		543.5
Output Power	dBm	-2.0	0.0	+2.0
Step Size	KHz		100	
Settling Time	msec		10	30
Output Impedance	$\Omega$		50	
Phase Noise @1kHz offset	dBc / Hz		-79	-74
Phase Noise @10kHz offset	dBc / Hz		-108	-103
Phase Noise @100kHz offset	dBc / Hz		-132	-127
Phase Noise @1MHz offset	dBc / Hz		-152	-147
2nd Harmonic Suppression	dBc		-33	-20
Sideband Spurious Suppression	dBc			-70
Reference (input frequency)	MHz	5		100
Reference (input level)	dBm	-5		+5
VCO Power Supply (Vcc) Voltage	Vdc		5	
VCO Power Supply (Vcc) Current	mA		22	30
PLL Power Supply (Vcp) Voltage	Vdc		5	
PLL Power Supply (Vcp) Current	mA		5	10
Operating Temperature Range	$^{\circ}\text{C}$	-40		+85