## K1526D Series 9x14 mm, 5.0 Volt, CMOS/TTL, VCXO

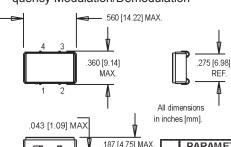


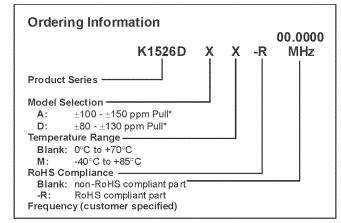






- Former Champion Product
- Phase-Locked Loops (PLL's), Clock Recovery, Reference Signal Tracking, Synthesizers, Frequency Modulation/Demodulation

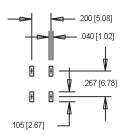




<sup>\*</sup> Above 40 MHz, pull is  $\pm 100$  ppm or  $\pm 80$  ppm minimum (no maximum) M3026Sxxx - Contact factory for datasheet.

l l
.043 [1.09] MAX
.187 [4.75] MA
DENOTES PIN 1.
.018 [0.46] TYP.

SUGGESTED SOLDER PAD LAYOUT



D	in	Co	nr	0	sti	0	10
		$\sim$	'111		-u	UI	13

PIN	FUNCTION			
1	Voltage Control			
2	Ground & Gnd Plane			
3	Output			
4	+Vdd			

	PARAMETER	Symbol	Min.	Тур.	Max.	Units	Condition/Notes
-	Frequency Range	F	2	1 yp.	40	MHz	- COMMINITORIS
-	Operating Temperature	T <sub>A</sub>	(See ordering information)				
	Storage Temperature	Ts	-40	lering inner	+125	°C	
	Frequency Stability	ΛF/F	1	<u> </u>		LÜ	
	Overall	۵۱/۱	Inclusive	of Calibra	ation Temp	erature	
	o veran	Inclusive of Calibration, Temperature, Voltage, Load, and Aging					
	0°C to +70°C				+25	ppm	
	-40°C to +85°C				±50	ppm	
	Aging						
	1 <sup>st</sup> Year		-3		+3	ppm	
	Thereafter (per year)	300 300 300 300 300 300 300 300 300 300	-1		+1	ppm	
ns	Pullability/APR		(See ordering information)				
	Control Voltage	Vc	0.5	2.5	4.5	V	T
Specifications	Linearity						Positive Monotonic Slope
2	2.000 to 33.000 MHz				5	%	
2	33.001 to 160.000 MHz				10	%	
Sp	Modulation Bandwidth	fm	20			KHz	±3dB
Electrical	Input Impedance	Zin	50k		1	Ohms	@ 10 kHz
	Input Voltage	Vdd	4.5	5.0	5.5	V	
	Input Current	ldd			26	mA	
	Output Type						HCMOS/TTL
	Load	5 TTL or 15 pF HCMOS					See Note 1
	Symmetry (Duty Cycle)						See Note 2
	TTL & CMOS < 33 MHz		45		55	%	
	CMOS ≥ 33 MHz		40		60	%	
	Logic "1" Level	Voh	4.5			V	
	Logic "0" Level	Vol			0.5	V	
	Output Current				±16	mA	
	Rise/Fall Time	Tr/Tf			4	ns	
	Start up Time				10	ms	
	Phase Jitter @ 26 MHz	φЈ		4		ps RMS	Integrated 12 kHz – 20 MHz
	Phase Noise (Typical)	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	Offset from carrier
	@ 26 MHz	-65	-95	-115	-130	-140	dBc/Hz
Ital	Mechanical Shock	Per MIL-S	TD-202, Method 213, Condition C (100 g's, 6 mS duration, ½ sinewave)				
Environmental	Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)					
	Hermeticity	Per MIL-STD-202, Method 112, (1x10-8 atm. cc/s of Helium)					
100	Thermal Cycle	Per MIL-STD-883, Method 1010, Condition B (-55°C to +125°C, 15 min. dwell, 10 cycles)					
Ē	Solderability	Per EIAJ-STD-002					
Buout	Max Soldering Conditions	See solder profile, Figure 1					

- 1. TTL load see load circuit diagram #1. HCMOS load see load circuit diagram #2.
- 2. Symmetry is measured at 1.4 V with TTL load, and at 50% Vdd with HCMOS load.

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.





