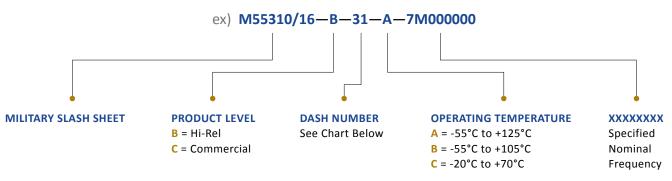


## MIL-55310/16-Series Specifications



 $A - 0.887L \times 0.540W \times 0.200H$  (in)  $B - 0.887L \times 0.540W \times 0.265H$  (in)

PDI *MIL-PRF-55310/16* Oscillators are available in both standard and custom frequencies to provide precision timing in a hermetically sealed package for military and avionics applications.



	ash o.		Input Current	_			Initial		Opera	ting Tempe	rature
Pac <b>A</b>	kage <b>B</b>	Frequency Range	(1) 5.25 V ±1% Max	Rise/Fall Times Max	Cycle @ 1.4 Vdc	Load (2) Max	<b>Accuracy @ 23°C</b> ppm Max	Aging Per Year ppm Max	(A)	(B)	(C)
21 24	22 25	750 KHz to 5 MHz	70 mA	15 nS	45 to 55%	10 TTL	±15	±5 ±10	±50 ±100	±40 ±80	±25 ±50
31	32	4 MHz to	30 mA	15 nS	40 to 60%	10 TTL	±15	±5	±50	±40	±25
34	35	20 MHz	30 IIIA	13 113	40 (0 60% 10 111	±25	±10	±100	±80	±50	
41	42	20 MHz to 65 mA	65 A 5 6	40.1 600/	6 771	±15	±5	±50	±40	±25	
44	45				40 to 60%		±25	±10	±100	±80	±50
	Aging Per Year (Max) (Measurements shall be taken @+70°C ±0.2°C at intervals of not					±5 p	ma	±10	ppm		

Aging Per Year (Max) (Measurements shall be taken @+70°C ±0.2°C at intervals of not more than every 72 hours for 30 days minimum)	±5 ppm	±10 ppm
Per 30 Days	±0.7 ppm	±1.5 ppm
Per 90 Days	±1.5 ppm	±3.0 ppm

#### NOTES:

(1) Maximum input current for no load condition. Actual configuration of TTL loads must be added to determine power supply requirements.

(2) A TTL unit load is defined as: 1.60 mA sink, 0.04 mA source, and 2.0 pF capacitance.

Environmental Specifications				
Terminal Strength  MIL-STD-202 , Method 211 , Condition C  Applied Force: 2 pounds each terminal for 10 seconds , Bends: 5 at 45 degrees each				
Vibration, sinusoidal	IAW MIL-PRF-55310 and MIL-STD-202 , Method 204  Non-operating: Test Condition D, Operating: Not Required			
Ambient Pressure	Non-operating: IAW MIL-PRF-55310 , Operating: MIL-STD-202 , Method 105 , Condition C			

The product described in this spec. consist of this specification and MIL-PRF-55310.

Decimal XXX =  $\pm$  .005, XX =  $\pm$  .020 Metric [XXX =  $\pm$  .13], [XX =  $\pm$  .50]

rev: NA	SIZE: A	CAGE: A	<b>1</b> of <b>3</b>
---------	---------	---------	----------------------



# MIL-55310/16-Series Specifications

	Frequency Range 750KHz to 60MHz	Units	
	vs Temperature (Max)		
	-20 to +70°C (Type C)	Per Chart	
	-55 to +105°C (Type B)	Per Chart	
	-55 to +125°C (Type A)	Per Chart	
Frequency Stability	vs Supply Voltage (Max. for a 10% change) (Measurements taken at reference temperature and operating temperature range end points)	±2.0	ppm
	Initial Accuracy (@ +23°C ±1.0°C) Within 30 Days of Shipment	Per Chart	
Tamananahuna Danas	Operating	Per Chart	•c
Temperature Range	Storage	- 62 to +125	
Output		TTL	
Supply Voltage	±10.0 %	+5.0	Vdc
Logic Loyals	High (Min)	2.4	\/_d
Logic Levels	Low (Max)	0.5	Vdc

Test Inspection	Product Level B Method Condition		
Internal Visual	MIL-STD-883, Method 2017 and 2032		
Stabization bake (prior to seal) 1/	MIL-STD-883, Method 1011, Condition C (+150°C) 48 hours min.		
Temperature Cycling	MIL-STD-883, Method 1010 Condition B		
Constant Acceleration	MIL-STD-883, Method 2001. Condition A, Y1 only (5000 g's)		
Seal (Fine and Gross Leak) 2/	MIL-STD-883, Method 1014		
Burn-In (Load)	+125C, nominal supply voltage and burn-in load, 160 hours minimum		
Electrical Test:	Nominal supply voltages, specified load, +23°C and verify frequency at the temperature extremes		
Input Current Power	4.8.5 of MIL-PRF-55310		
Output Waveform	4.8.20 of MIL-PRF-55310		
Output Voltage-Power	4.8.21 of MIL-PRF-55310		
As Specified	3.1 of MIL-PRF-55310		

REV: NA	SIZE: A	CAGE: A	<b>2</b> of <b>3</b>



## MIL-55310/16-Series Specifications

### PACKAGE DIMENSIONS

PIN	CONNECTION	
1-6	No Connect	
7	Ground/Case	
8	Output	
9-13	No Connect	
14	Supply Voltage	

