

MIL-55310/26-Series Specifications



A – 0.887L x 0.540W x 0.200H (in)

B – 0.815L x 0.515W x 0.200H (in)

PDI MIL-PRF-55310/26 Oscillators are available in both standard and custom frequencies to provide precision timing in a hermetically sealed package for military and avionics applications.

ex) **M55310/26—B—32—A—7M000000**

MILITARY SLASH SHEET

PRODUCT LEVEL

B = Hi-Rel

C = Commercial

DASH NUMBER

See Chart Below

OPERATING TEMPERATURE

A = -55 to +125°C

B = -55 to +105°C

C = -20 to +70°C

XXXXXXXX

Specified

Nominal

Frequency

Dash No. Package	Frequency Range	Input Current (No Load) 5.0 V ±10% Max	Rise/Fall Times Max	Duty Cycle @ 1.4 Vdc	Initial Accuracy @ 23°C ppm Max	Aging Per Year ppm Max	Operating Temperature		
							(A)	(B)	(C)
02 03	15 KHz to 1 MHz	10 mA	10 nS	45 to 55%	±15	±5	±65	±55	±40
06 07					±25	±10	±100	±75	±50
22 23	1 MHz to 4 MHz	15 mA	10 nS	45 to 55%	±15	±5	±65	±55	±40
26 27					±25	±10	±100	±75	±50
32 33	4 MHz to 20 MHz	20 mA	10 nS	40 to 60%	±15	±5	±65	±55	±40
36 37					±25	±10	±100	±75	±50
42 43	20 MHz to 35 MHz	35 mA	10 nS	40 to 60%	±15	±5	±65	±55	±40
46 47					±25	±10	±100	±75	±50
52 53	35 MHz to 50 MHz	40 mA	5 nS	40 to 60%	±15	±5	±65	±55	±40
56 57					±25	±10	±100	±75	±50
62 63	50 MHz to 60 MHz	70 mA	5 nS	40 to 60%	±15	±5	±65	±55	±40
66 67					±25	±10	±100	±75	±50

Aging Per Year (Max) (Shall be in accordance with MIL-PRF-55310)

±5 ppm

±10 ppm

Per 30 Days

±0.7 ppm

±1.5 ppm

Per 1 Year After 30 Days

±5 ppm

±10 ppm

Environmental Specifications

Vibration, sinusoidal MIL-STD-202 , Method 204, **Non-operating:** Test Condition D, **Operating:** Not Required

Shock (Non-operating) MIL-STD-202 , Method 213 , Condition I

Thermal Shock (Non-operating) MIL-STD-202 , Method 107 , Condition B

Ambient Pressure **Non-operating:** IAW MIL-PRF-55310 , **Operating:** MIL-STD-202 , Method 105 , Condition C

Resistance to Soldering Heat MIL-STD-202 , Method 210 , Condition E

Moisture Resistance MIL-STD-202 , Method 106

Terminal Strength MIL-STD-202 , Method 211 , Condition C
Applied Force: 2 pounds each terminal for 10 seconds , **Bends:** 5 at 45 degrees each

Solderability MIL-STD-202 , Method 208

Resistance to Solvents MIL-STD-202 , Method 215

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

Decimal XXX = ± .005, XX = ± .020 Metric [XXX = ± .13], [XX = ± .50]

REV: NA

SIZE: A

CAGE: A

1 of 4

MIL-55310/26-Series Specifications



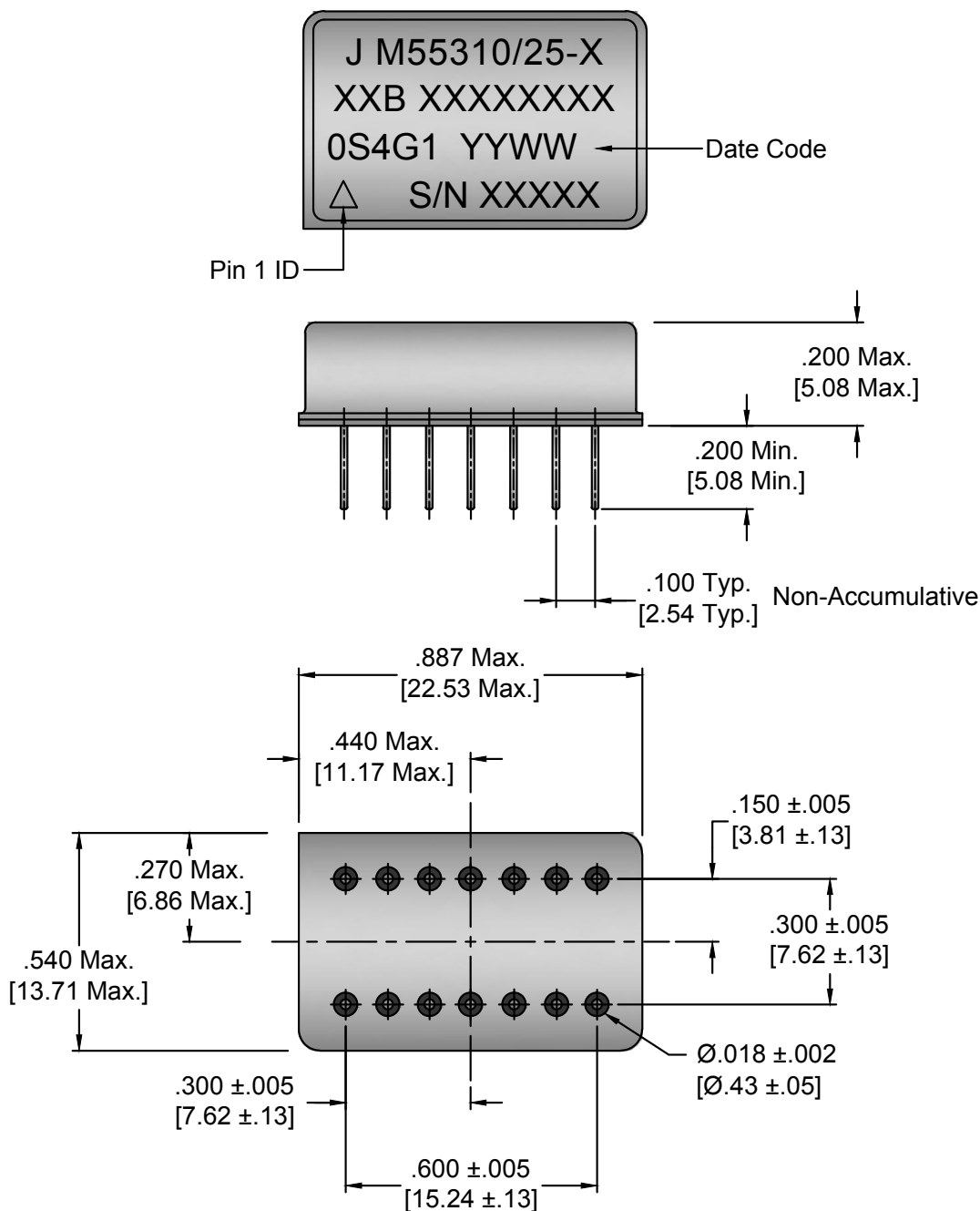
Parameter		Frequency Range	Units
		15KHz to 60MHz	
Frequency Stability	vs Temperature (Max)		ppm
	-20 to +70°C (Type C)	Per Chart	
	-55 to +105°C (Type B)	Per Chart	
	-55 to +125°C (Type A)	Per Chart	
	vs Supply Voltage (Max. for a 10% change) (Measurements taken at reference temperature and operating temperature range end points)	±2.0	
	Tolerance (@ +23°C ± 1.0°C) (Max) Within 30 Days of Shipment	Per Chart	
Temperature Range	Operating	Per Chart	°C
	Storage	-62 to +125	
Supply Voltage	±10.0 %	+5.0	Vdc
Output		HCMOS	
Start-up Time	Max	15	mS
Load	Resistance	10 ±5%	KΩ
	Capacitance	15 ±5%	pF
Logic Levels	Logic 1 (High) Min	90	%
	Logic 0 (Low) Max	10	

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

PACKAGE DIMENSIONS

Configuration A

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



PACKAGE DIMENSIONS**Configuration B**

PIN	CONNECTION
1	No Connect
7	Supply Voltage
8	Output
14	Ground/Case

