

Technical Data

Supply Voltage	+24V DC, +28V DC
Supply Current	550 mA nom. with Pout = 0.35-1.5W@24V 550 mA nom. with Pout = 0.35-1.5W@28V 700 mA nom. with Pout = 2.0-4.0W@24V 700 mA nom. with Pout = 2.0-3.0W@28V ^(VI) 2000 mA nom. with Pout = 7.0W@24V ^(I) 2700 mA nom. with Pout = 20W@24V ^(I)
Output Impedance	50 Ω (nominal)
Maximum RF Power (adjustable)	< 0.1 W ... > Pout
Frequency Accuracy	$\pm 0.1\%$
Harmonic Distortion^(II)	≤ -20 dBc
Analogue modulation	
Impedance	50 Ω (nominal)
Voltage range @ 50 Ω	0 ... +1 V ^(III)
RF ON / OFF ratio	≥ 35 dB ^(IV)
Digital modulation	
Impedance	50 Ω (nominal)
Level	Standard TTL ^(V)
RF ON / OFF ratio	≥ 35 dB
RF Output Frequencies^(VII)	80, 110, 150, 200, 260 & 350 MHz
RF Rise/Fall Times	12 nsec @ 80 MHz
(Rise = 10% to 90%)	9 nsec @ 110 MHz
(Fall = 90% to 10%)	7 nsec @ 150 MHz 5 nsec @ 200 MHz 4 nsec @ 260 MHz 4 nsec @ 350 MHz

^(I) 7W and 20W versions use an external amplifier.

^(II) Into 50 Ω load

^(III) Part numbers -52 and -58 are ≤ -30 dBc

^(IV) Part number -40 is ≥ 42 dB

^(V) Part numbers -12, -43 are (OFF: $<+0.3V$, ON: $+1.0V$)

^(VI) Part numbers -03, -18, -22, -31, -44, -69: 550mA nom.

^(VII) Other custom frequencies are available

Connectors

RF output connector	SMA (female)^(I)
Modulation connector	SMB (male) ^(II)
Frequency Tuning connector	SMC (male)
Reference Frequency connector	SMC (male)
ALC Connector	
Input	Solder terminal (filtered feed-thru)
Ground	Solder lug
Power Supply connector	
Input	Solder terminal (filtered feed-thru) ^(III)
Ground	Solder lug ^(III)

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- (i) Part number -12 & -43 have SMB (male)
 - (ii) Part numbers -12, -29 & -43 have SMA (female)
 - (iii) Part numbers -45 & -50 have Mini-Universal Mate-N-Lok connector
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Frequency Tuning

Input Impedance	1 kΩ nominal
FM Bandwidth (3 dB)	90 kHz
Frequency Range	Input Voltage
50 – 100 MHz	+1.5 - +15 V nominal ⁽ⁱ⁾
75 – 150 MHz	+1.5 - +15 V nominal ⁽ⁱⁱ⁾
150 – 280 MHz	+2.0 - +15 V nominal ⁽ⁱⁱⁱ⁾
200 – 380 MHz	+1.0 - +15 V nominal ^(iv)
270 – 430 MHz	+2.5 - +12 V nominal ^(v)

- (i) Part numbers -04, -25 and -68
- (ii) Part numbers -23, -49 and -59
- (iii) Part numbers -17, -28 and -48
- (iv) Part numbers -62 and -63
- (v) Part number -70

ALC (Auxiliary Level Control)

Input Impedance	1 kΩ nominal⁽ⁱ⁾
ALC Bandwidth	35 kHz nominal
RF Output (0 W – Full power)	ALC Voltage level
+24 V (Vcc)	0 – +21 V nominal
+28 V (Vcc)	0 – +25 V nominal
+28 V (Vcc)	0 – +5 V nominal ⁽ⁱⁱ⁾
200 – 380 MHz	0 – +10 V nominal ⁽ⁱⁱⁱ⁾
270 – 430 MHz	

- (i) Part numbers -03, -10, -21, -22, -31, -38, -43, -69: 10KΩ
- (ii) Part numbers -03, -31, -38 and -43
- (iii) Part numbers -10, -21, -22 and -69

Reference Frequency

Output Reference Frequency	Fc divided by 256⁽ⁱ⁾
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- (i) Part number -21

Cooling, Dimensions, Weight

Cooling	Conduction
Pout	Base plate should be attached to suitable heat sink capable of dissipating:
1.0 W - 1.5 W	15 W
2.5 W - 3.0 W	20 W
4.0 W	22 W
Dimensions inches [mm]	
L x W x H	4 x 1.12 x 3.15 [102 x 29 x 80]
Weight lbs [kg]	0.53 [0.24] (nominal)

Environmental Conditions

Warm-up Time	5 minutes (nominal)
Base Plate Temperature	0° C to +60° C For optimum output power stability constant base plate temperature should be provided
Storage Temperature	-25°C to +85°C (non condensing)

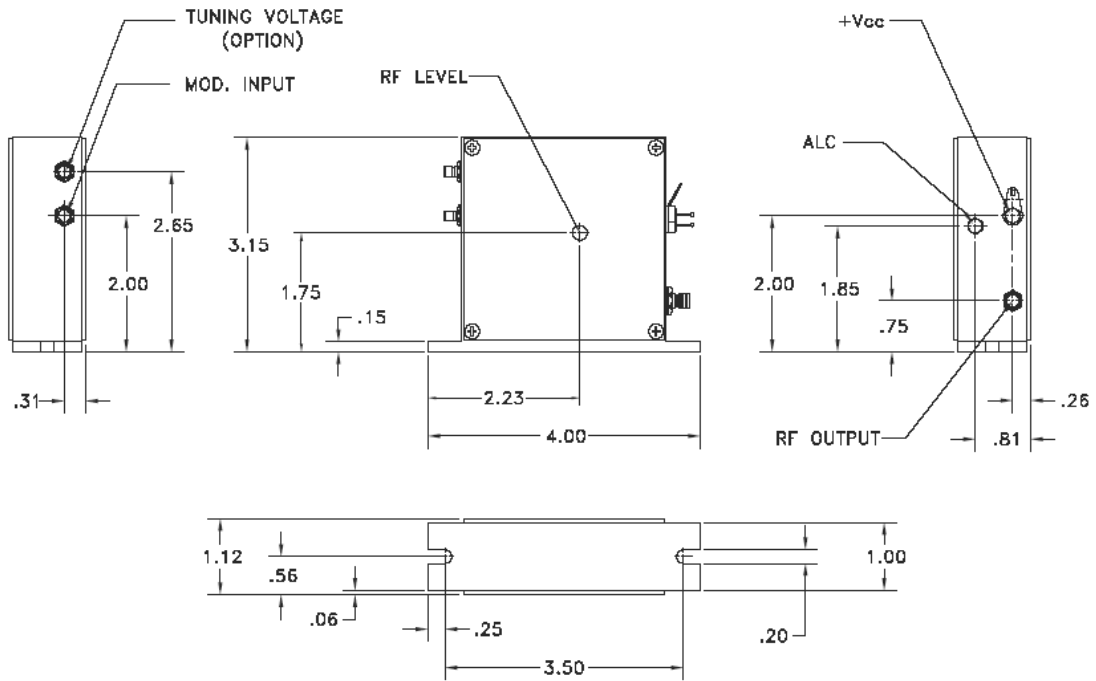
Absolute Maximum Ratings

Supply Voltage	+28 VDC
Analogue Modulation	-3.0 V to +3.0 V
Digital Modulation	-4.3 V to +4.3 V
Operating Temperature	+65°C (base plate temperature)

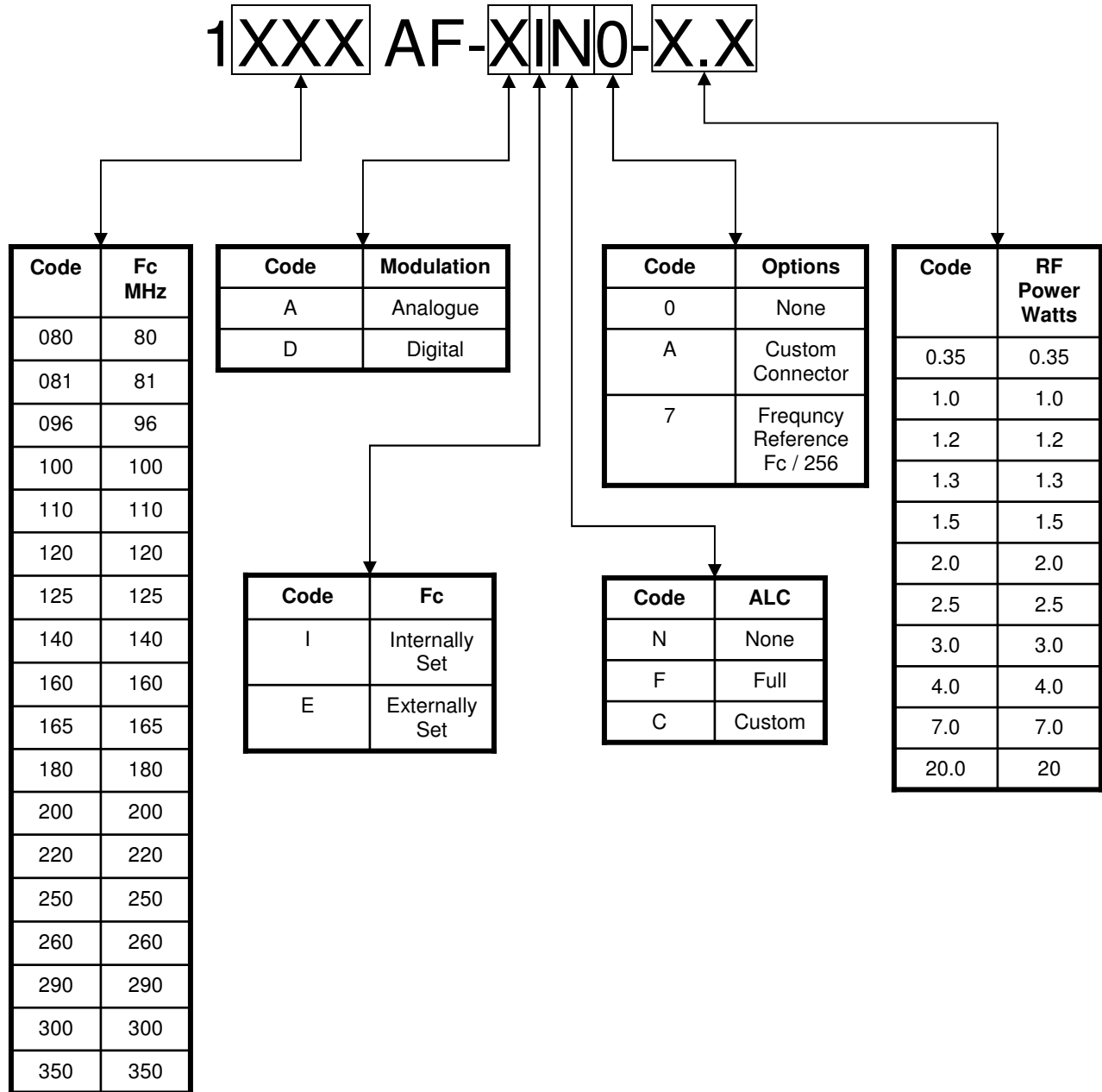
Quality Standards

EU 2002/95/EC (RoHS)	Compliant
Burn-in	12 Hours min @ +25° C and Pout

Outline Drawing:
(Dimensions in inches)



Variant List / Ordering Codes



Other Frequencies and customized versions available upon request.