



B3RX1652

SPECIFICATION

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Document Change Record

Issue	Date	Pages Affected	Reason(s) for change
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Distribution

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1 Specification limits

Note : All limits are over the full thermal range unless specified otherwise.

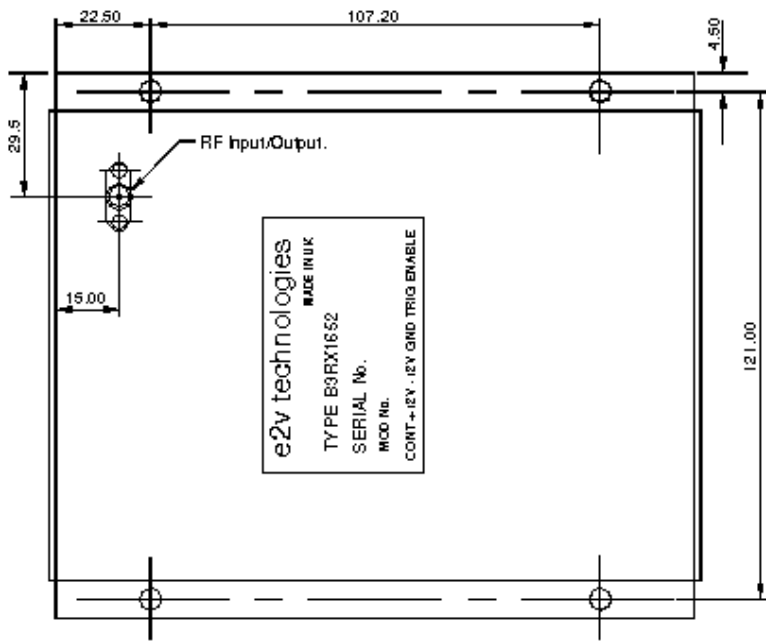
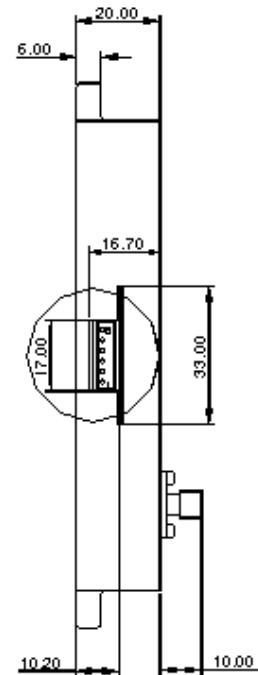
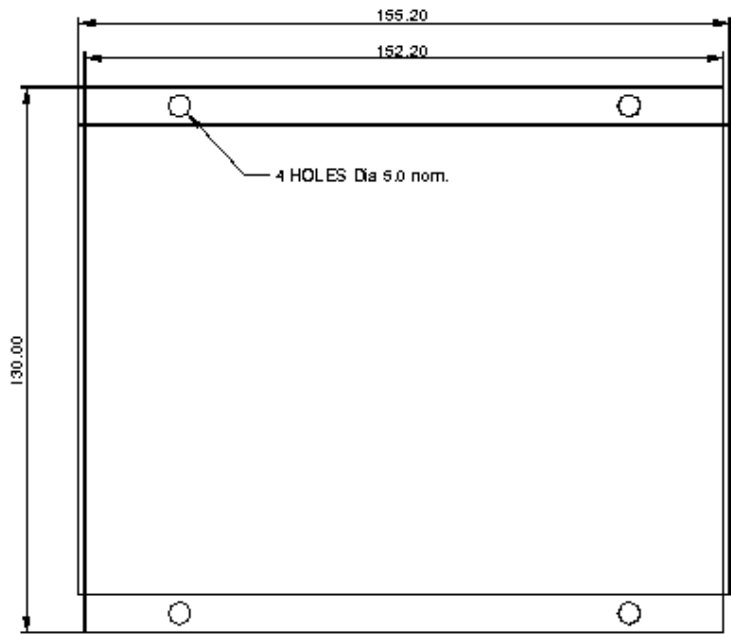
Electrical parameters

		<u>Min</u>	<u>Nom</u>	<u>Max</u>	<u>Unit</u>
1	Input power	+08		+28	dBm
2	Input pulse width	1.0			µs
3	Power tracking		10		dB
4	Tracking accuracy @ ambient	-1.5		+1.5	dBm
5	Tracking accuracy @ temp	-3.0		+3.0	dBm
6a	Power output (2nd pulse max output)	-36			dBm
6b	Power output (2nd pulse min output)			-56	dBm
7a	Minimum output power range	22			dB
7b	Control voltage range	0		10	V
7c	Maximum control voltage input			12	V
8	Frequency range (input RF)	9.365		9.455	GHz
9	Maximum tuning range			200	MHz
10	Spurious oscillations			-60	dBm
11	Steps levels				
	2nd pulse to noise floor	12			dB
	1st pulse to 2nd pulse	9.0		11.0	dB
12	Enable				
	PM off (line low)			0.8	V
	PM on (line high)	2.0		5.50	V
13	AFC				
	lock control about magnetron freq	+/-1		+/-3.0	MHz

Note AFC will ramp output RF frequency through the exact magnetron input frequency to ensure maximum sensitivity.

		<u>Min</u>	<u>Nom</u>	<u>Max</u>	<u>Unit</u>
14	Trigger				
	Trigger (high)	2.5		12	V
	Trigger (low)			0.7	V
	Timing : rising edge 50ns to 150us before start of magnetron pulse				
	Width	100		10,000	ns
	Impedance	10			kΩ
15	Delay				
	1st pulse from magnetron pulse		180		μs
16	Transmitted pulse lengths		4		μs
17	Inter pulse spacing		4		μs
18	Transmission pulses (within freq and power spec)				
	Into monitor antenna	60			
19	Voltage supplies				
	+12V	+10.0		+12.6	V
	-12V	-12.6		-10.0	V
20	Current				
	+12V (target <200mA)			300	mA
	-12V			200	mA
21	Temperature	-30		+80	°C
22	Humidity @ 40°C			95	%
23	Shock 30,000 reps (10ms @ 3Hz)			20	G
24	Vibration all axis				
	2 to 13.2 Hz	-1.0		+1.0	mm
	13.2 to 100 Hz			0.7	G
25	Reliability by parts to MIL STD 217F inc Notice 1				
	Naval sheltered MTBF	15,000			hours
26	Weight			1	Kg
27	Size			130	mm
				156	mm
				20	mm
28	Finish Alocrom 1200				
29	Interfaces				
	RF :	SMA female connector			
	Control :	S 6B-XH-A connector fitted			
30	Customer type number : B3RX1652 to be printed on label				

1.1 Mechanical outline



Dimension tolerance $\pm 0.25\text{mm}$ unless indicated otherwise.

NOTE: Connector pin connections:-

- 1 Enable
- 2 Trigger
- 3 Ground
- 4 -12V
- 5 +12V
- 6 Control

