FMT-2712

1 Watt 27MHz Radio Data Module

Features
• Enables sending of digital data to up to 3000m
• Digital Data supported: pulse width modulation signals, signals
  from standard encoder-decoder circuits of the given bandwidth
• Direct FM modulation

Applications
• Telecommand
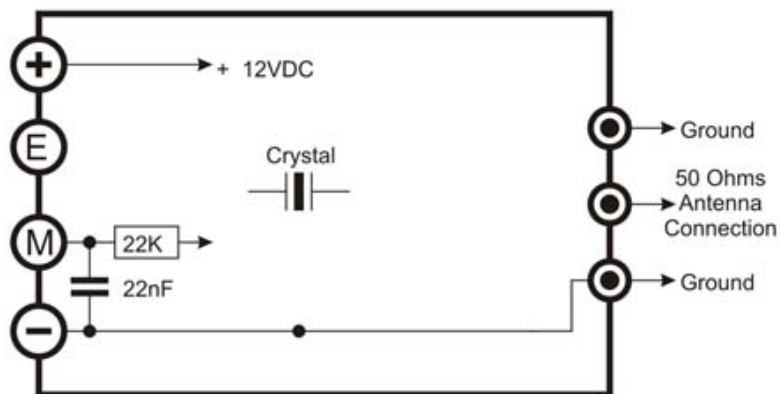• Radio data communications
• Commercial / industrial telemetry.

Description
This high power data module allows you to send your digital data to up to 3000 metres, when used with the Elsema FMR-05D receiver. Digital data such as pulse width modulation signals and signals from standard encoder-decoder circuits of the given bandwidth, can be transmitted by direct FM modulation.
Applications include telecommand, radio data communications and commercial/industrial telemetry.

Technical Data

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Supply Voltage	11-13.6V. Absolute Maximum 14VDC
Supply Current	300mA when enabled pin to +5V less than 1uA disabled and "M" terminal to 5V
Enable Voltage / Current	5-13.5VDC, max current 50uA
Operating Frequency	27.145MHz (Other freq. available: 27.045, 27.195 & 27.455MHz. NB. 27.455 freq. is not available for Australia)
Oscillation System	Crystal Controlled, 30ppm at 0-50°C
Operating Temperature Range	0-50°C
Data Input Level	Data should swing close to ground and +5V
Frequency Response	100Hz to 2400Hz
Baud rate	300-2400bps. For a baud rate of 4800bps a 2.2kOhms resister should be used in series with terminal "M". Manchester code is recommended
Recommended Receiver	FMR-05D (Outputs your digital data)
RF Power Output	1W into 50 ohms at 13.6VDC
Antenna	ANT27L with 50 ohms, shielded cable
Type of Emission	Narrow-band-width Frequency Modulation (5K00F1D)
Frequency Deviation	1500Hz non-return to zero
Harmonics	Less than -13dBm (50uW)
Weight	8 grams

Block Diagram

FMT-2712

+	12V DC Positive Supply	
E	Enable pin. When +5V is applied to this pin the transmitter is enabled. 0V disables transmitter	
M	Data input (FM-modulation input). Data should swing close to ground & +5V. A data rate of 2400 baud can be transmitted. For a baud rate of 4800 a 2.2k Ohms resistor should be used in series with terminal M.	
-	Negative to supply, ground & RF-ground	

Dimension
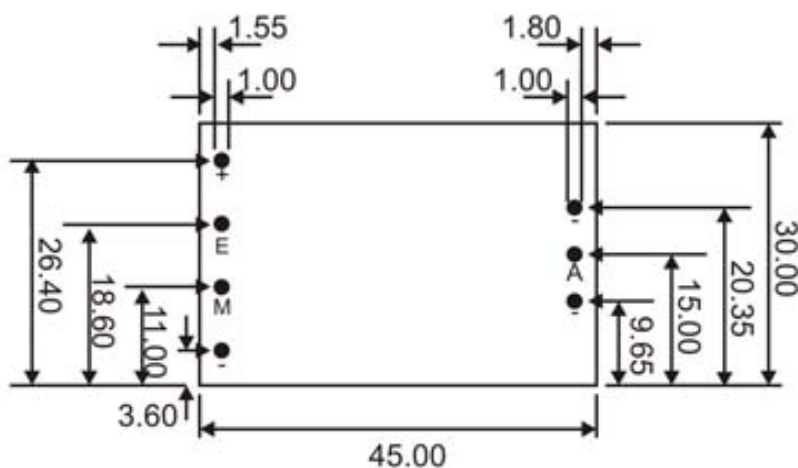
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