



T916AM

SMT Package



Designed for long-range (up to 1000 ft*) unlicensed wireless applications under Part 15 of the FCC Regulations. This module requires no external components or production tuning. The module generates 100% on-off keyed (OOK) modulation of a SAW stabilized carrier centered at 916.5 MHz. An internal filter attenuates harmonics to levels ensuring compliance with FCC spurious emissions requirements. The module is packaged in an RFI/EMI shielded enclosure. Use with R916AM receiver or other AM receivers operating at 916.5 MHz.

916.5 MHz On-Off Keyed Transmitter Module

Features

- Compatible with R916 AM Receivers
- Low Cost
- Simple Application
- Long Range-- exceeds 1000 ft*
- No RF Design Required
- Low Power Requirements
- SAW Stabilized Carrier
- Conforms to FCC Requirements

Typical Applications

- Data Transmission
- Telemetry
- Remote Control
- Utility Meter Reading
- RFID

Part Ordering Information

<i>Frequency (MHz)</i>	<i>Model Number</i>	<i>Matching Receiver</i>
916.500	T916AM	R916AM

Maximum Ratings

SYM	PARAMETER	VALUE	UNIT
V _{cc}	DC Supply Voltage	-0.5 to +15.0	VDC
D _{in}	Data Input	-0.5 to V _{cc}	VDC
T _{stg}	Storage Temperature	-50 to +150	C

¹ Line of sight range, when used with a 1/4-wave ground plane antenna.

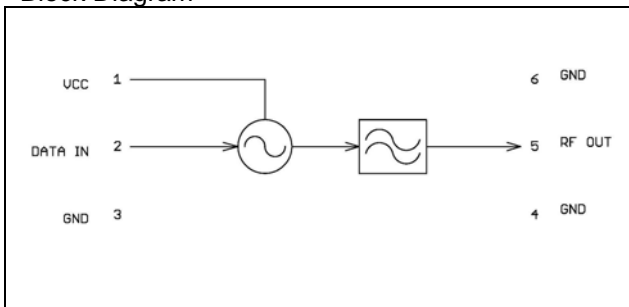
Specifications subject to change without notice or obligation.

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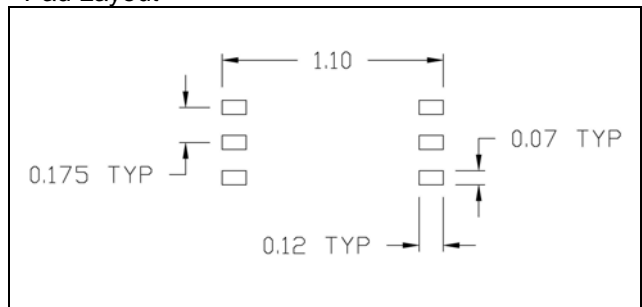
Electrical Characteristics

Sym	Parameter	Min	Typ	Max	Unit
VCC	Operating Voltage Range	2.7	3.0	3.3	Volts
I _{cc}	Operating Current (peak)		12		mA
f _{max}	Data Rate			10	kbps
f _c	Center Frequency	916.4	916.5	916.6	MHz
P _{out}	RF Output Power	0	+3	+6	dBm
t _r	RF Rise Time			50	uS
t _f	RF Fall Time			100	uS
	Harmonic Suppression		-45		dBc
Z _{out}	Antenna Input Impedance		50		Ohms
T _{op}	Operating Temperature	-20		+70	C

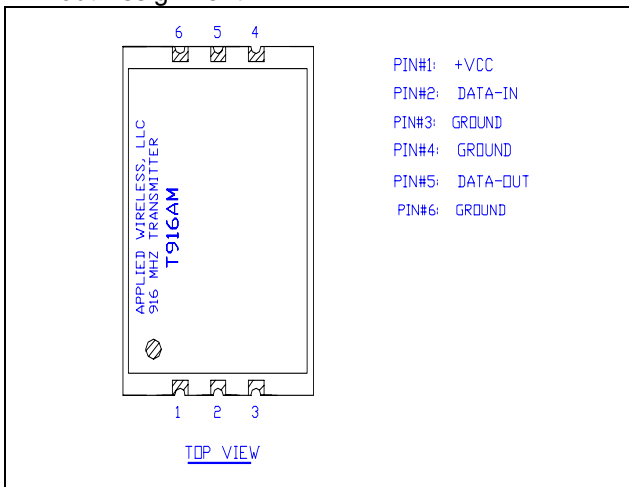
Block Diagram



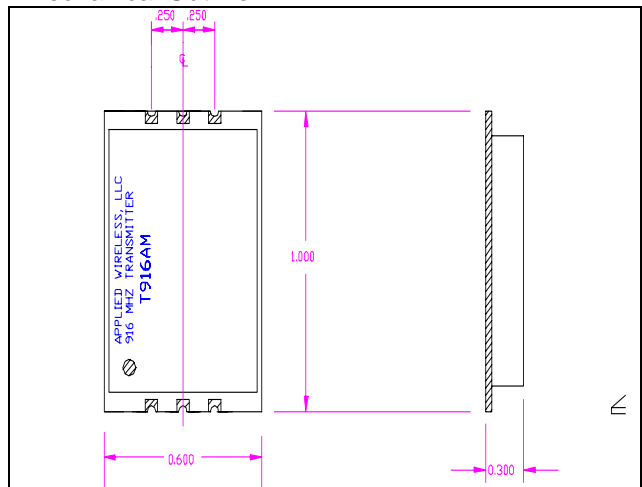
Pad Layout



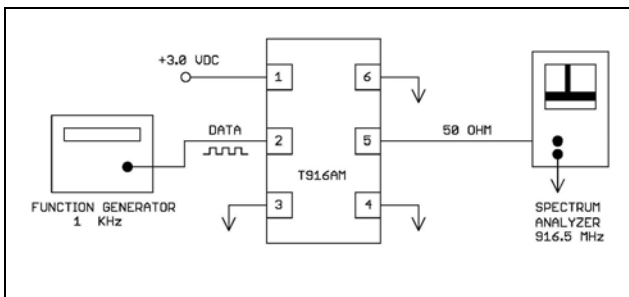
Pinout Assignment



Mechanical Outline



Test Circuit



Notes

All antennas should be 50 Ohm. A typical antenna would be a quarter wavelength wire or rod (at 303 MHz that would be 9.5 inches).