


MODELS
M-170/M-170C
HIGH LEVEL DOUBLE-BALANCED
MICROWAVE MIXER 0.5-18.0 GHz

8 dB Typical Midband Conversion Loss
 22 dB Typical Midband Third Order
 Intercept

Guaranteed Specifications*

(From -55°C to +85°C)

Frequency Range	RF, LO Ports	0.5-18.0 GHz	
	IF Port (3 dB BW)	2-5000 MHz	
Conversion Loss**	0.5-8 GHz	9 dB Max	
	8-16 GHz	11 dB Max	
	16-18 GHz	12 dB Max	
Isolation	LO to RF	(0.5-2 GHz)	10 dB Min
		(2-15 GHz)	20 dB Min
		(15-18 GHz)	17 dB Min
	LO to IF	(0.5-4 GHz)	22 dB Min
		(4-12 GHz)	17 dB Min
		(12-18 GHz)	22 dB Min
	RF to IF	(0.5-18 GHz)	18 dB Min

Operating Characteristics

Impedance 50 Ohms Nominal

Maximum Input
 Total Power 600 mW Max @ 25°C
 Derated 6.4 mW/°C

RF Input
 1 dB Compression +12 dBm Typical
 1 dB Desensitization +9.5 dBm Typical

SSB Noise Figure Within 1 dB of Conversion Loss Max

3rd Order Input Intercept
 0.5-18 GHz +22 dBm Typical

Package Type M-170 Flatpack (FP-10)
 M-170C Connectorized (C-3)
 (See pages 475 and 481 for physical dimensions.)

Environmental

These units are designed to meet the environmental and screening requirements of Table 1C, page 498 of the Adams-Russell catalog.

Pin Configuration RF; P3, LO; P1, IF; P2.
 Case ground.

* All specifications apply when operated at +19 dBm available LO power with 50 ohm source and load impedance.

** For IF frequencies of 5-1000 MHz and an RF of -10 dBm or lower.
 Formerly Anzac Model MD-170, MDC-170

Ordering Information

Model No.	Part No.	Connectors	Unit Price (5-9 Units)
M-170	9349	Pin	\$503
M-170C	9344	SMA	590

Delivery is from stock.



Make the Connection...

161 E. Industry Court Deer Park, NY 11729 Fax (516) 242-1222

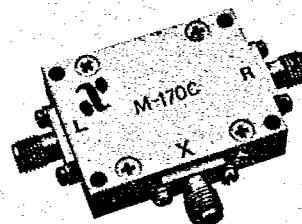
Adams Russell
 COMPONENTS GROUP

For Technical Information, Call (516) 242-1100

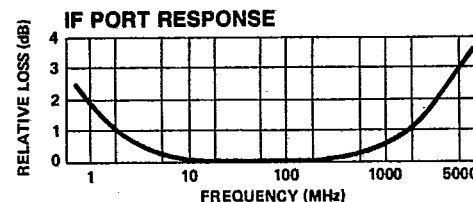
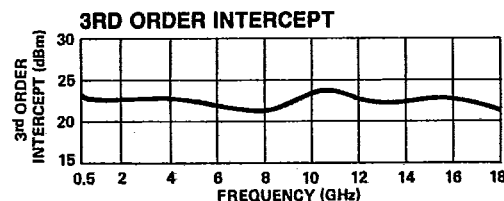
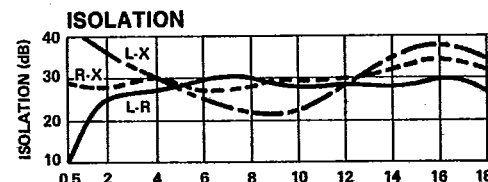
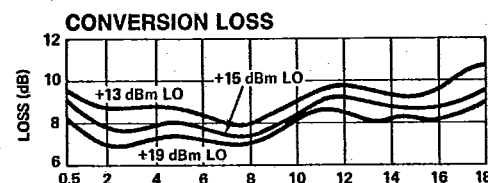
For Ordering Information, Call (617) 273-3333

B-05-11

T-77-09



Typical Performance



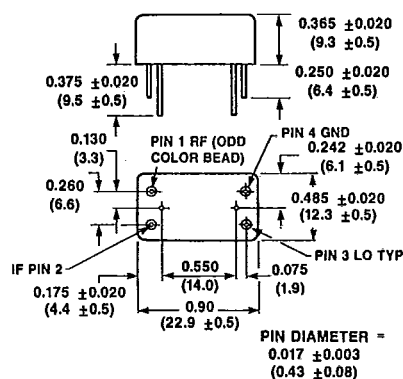
UNLESS OTHERWISE NOTED:

.XXX = ± 0.010 , .XX = ± 0.020 (.X = ± 0.3), (.XX = ± 0.5)

DIMENSIONS IN () ARE IN MM.

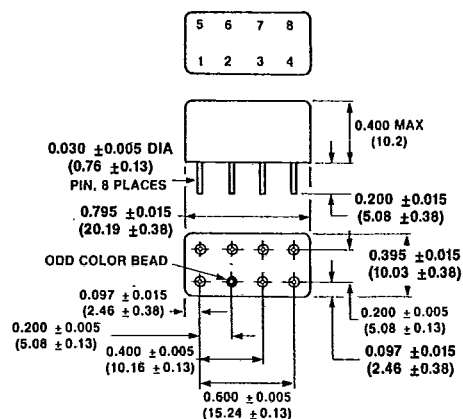
MECHANICAL DATA

RH-2



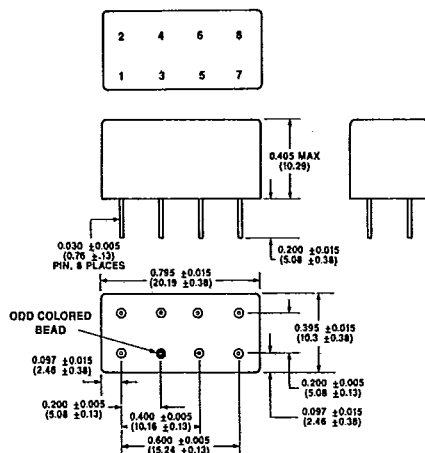
WEIGHT (APPROX.): 0.23 OUNCES 6.5 GRAMS

RH-3



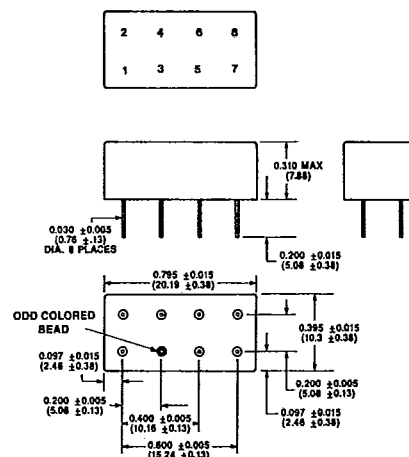
WEIGHT (APPROX.): 0.23 OUNCES 6.5 GRAMS

RH-4



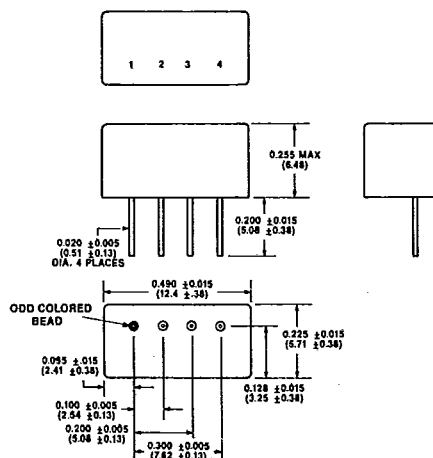
WEIGHT (APPROX.): 0.23 OUNCES 6.5 GRAMS

RH-5



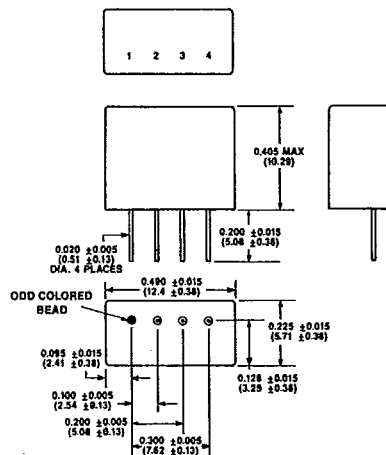
WEIGHT (APPROX.): 0.16 OUNCES 4.4 GRAMS

RH-6



WEIGHT (APPROX.): 0.05 OUNCES 1.5 GRAMS

RH-7

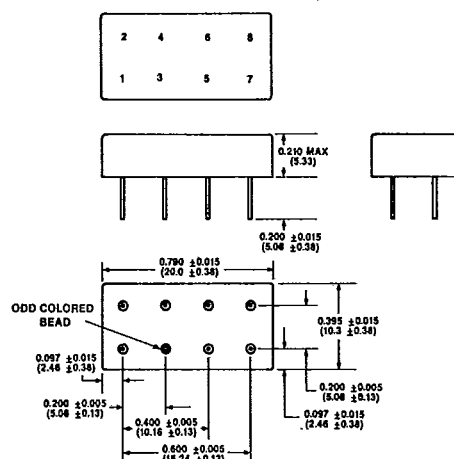


WEIGHT (APPROX.): 0.04 OUNCES 1.3 GRAMS

MECHANICAL DATA

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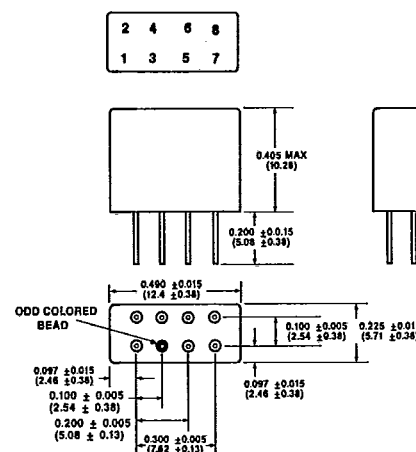
RH-8



WEIGHT (APPROX.): 0.13 OUNCES 3.5 GRAMS

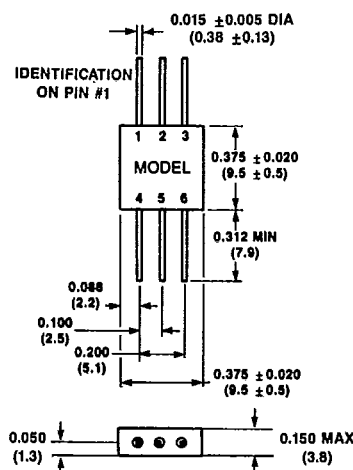
RH-9

T-90-20



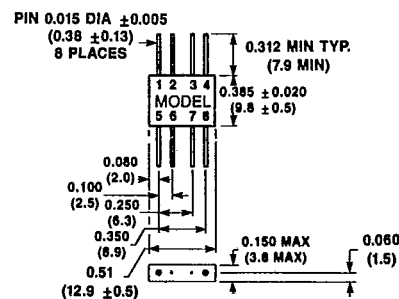
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FP-1



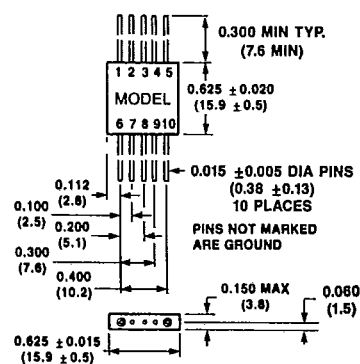
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FP-2



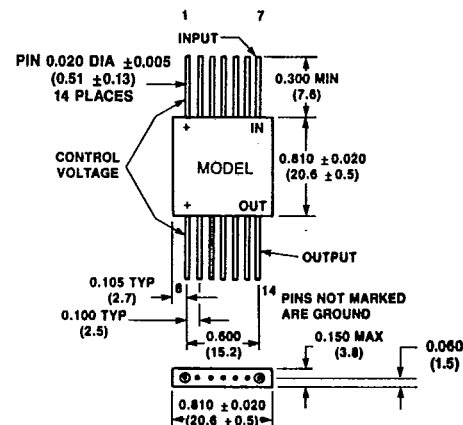
WEIGHT (APPROX.): 0.09 OUNCES 2.5 GRAMS

FP-3



WEIGHT (APPROX.): 0.12 OUNCES 3.4 GRAMS

FP-4



WEIGHT (APPROX.): 0.21 OUNCES 6 GRAMS

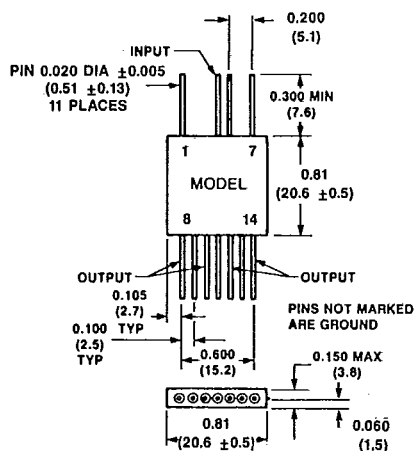
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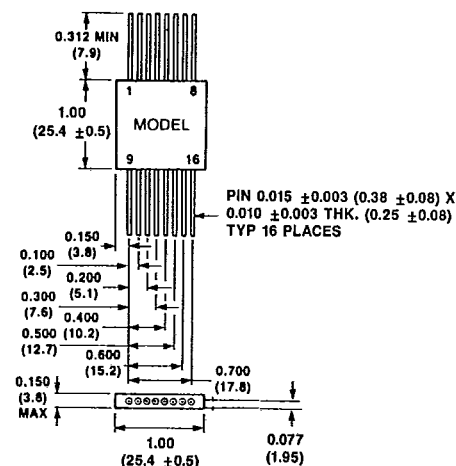
MECHANICAL DATA

FP-5



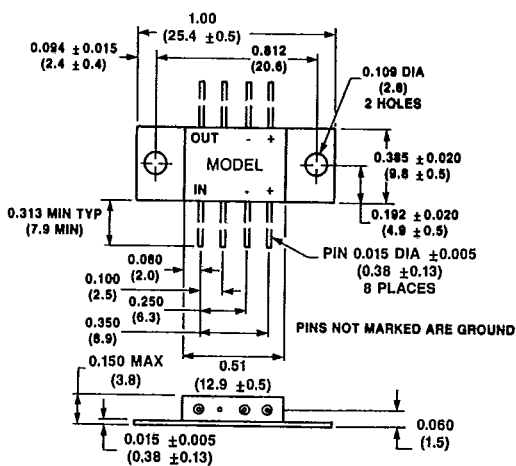
WEIGHT (APPROX.): 0.21 OUNCES 6 GRAMS

FP-6



WEIGHT (APPROX.): 0.24 OUNCES 6.8 GRAMS

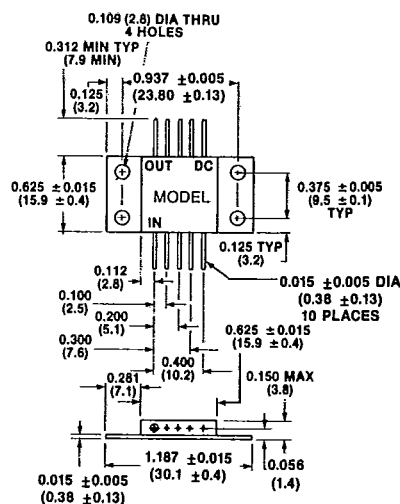
FP-7



(NOTE: AM-123 POSITIVE VOLTAGE ONLY.)

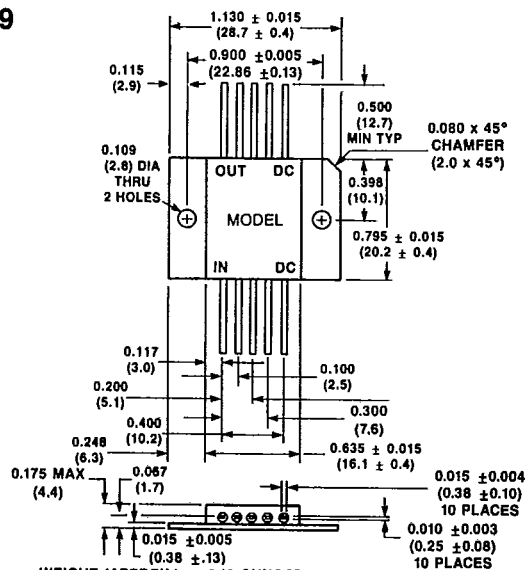
WEIGHT (APPROX.): 0.09 OUNCES 2.5 GRAMS

FP-8



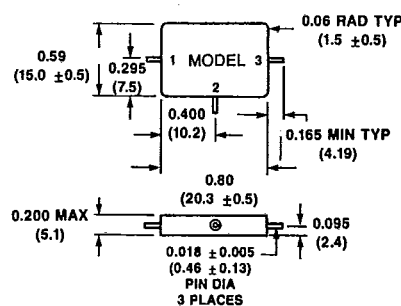
WEIGHT (APPROX.): 0.17 OUNCES 4.8 GRAMS

FP-9



WEIGHT (APPROX.): 0.18 OUNCES 5 GRAMS

FP-10



WEIGHT (APPROX.): 0.35 OUNCES 10 GRAMS