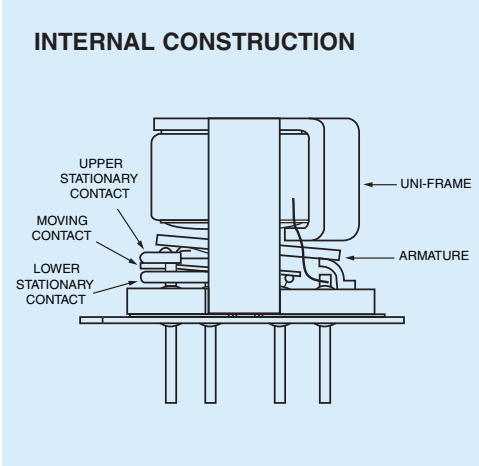

TELEDYNE
RELAYS
A Unit of Teledyne Electronics and Communications

**HIGH REPEATABILITY
 BROADBAND
 TO-5 RELAYS
 DPDT**

**SERIES
 RF300
 RF303**

SERIES DESIGNATION	RELAY TYPE
RF300	Repeatable RF relay
RF303	Sensitive, repeatable RF relay



PERFORMANCE FEATURES

The ultraminiature RF300 and RF303 relays are designed to provide improved RF signal repeatability over the frequency range. These relays are highly suitable for use in attenuator and other RF circuits, the RF 300 and RF303 feature:

- High repeatability.
- Broader bandwidth.
- Metal enclosure for EMI shielding.
- Ground pin option to improve case grounding.
- High isolation between control and signal paths.
- Highly resistant to ESD.

CONSTRUCTION FEATURES

The following unique construction features and manufacturing techniques provide excellent resistance to environmental extremes and overall high reliability.

- Uni-frame motor design provides high magnetic efficiency and mechanical rigidity.
- Minimum mass components and welded construction provide maximum resistance to shock and vibration.
- Advanced cleaning techniques provide maximum assurance of internal cleanliness.
- Gold-plated precious metal alloy contacts ensure reliable switching.
- Hermetically sealed.
- Solderable leads.

ENVIRONMENTAL AND PHYSICAL SPECIFICATIONS		
Temperature (Ambient)	Storage	-65°C to +125°C
	Operating	-55°C to +85°C
Vibration (General Note 1)		10 g's to 500 Hz
Shock (General Note 1)		30 g's, 6 msec, half-sine
Enclosure		Hermetically sealed
Weight	RF300	0.09 oz. (2.55g) max.
	RF303	0.16 oz. (4.5g) max.

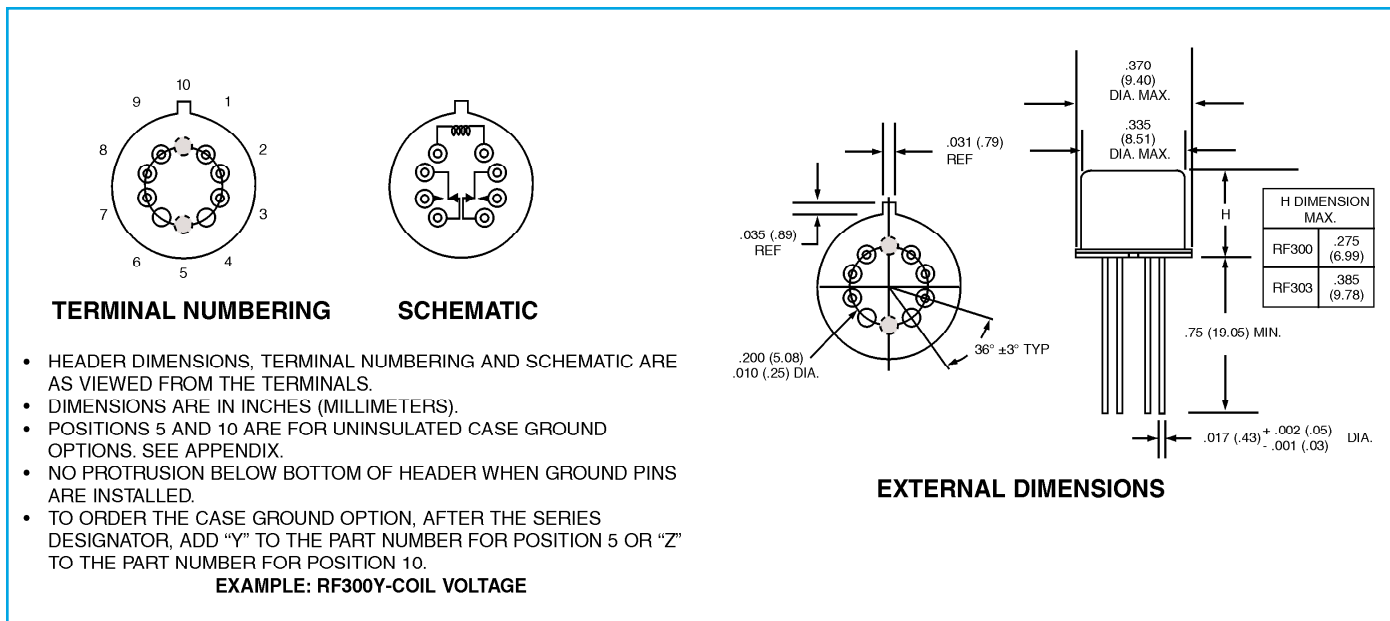
SERIES RF300 AND RF303

GENERAL ELECTRICAL SPECIFICATIONS (@25°C)

Contact arrangement		2 Form C (DPDT)
Rated duty		Continuous
Contact resistance		0.15 ohm max. initial (measured 1/8" from the header)
Contact load rating		Resistive: 1Amp/28Vdc Low level: 10 to 50 μ A, 10 to 50 mV
Contact life rating		10,000,000 cycles typical at low level
Coil operating power		RF300: 450 mW typical @ nominal rated voltage RF303: 200 mW typical @ nominal rated voltage
Operate time	RF300	4.0 ms. max.
	RF303	6.0 ms. max.
Release time	RF300	3.0 ms. max.
	RF303	3.0 ms. max.
Intercontact capacitance		0.4 pF typical
Insulation resistance		1,000 M Ω min. (between mutually isolated terminals)
Dielectric strength		350 VRMS / 60 Hz @ atmospheric pressure

DETAILED ELECTRICAL SPECIFICATIONS (@25°C)

BASE PART NUMBERS		RF300-5 RF303-5	RF300-12 RF303-12
Coil voltage, nominal, VDC		5.0	12.0
Coil resistance, ohms \pm 20%	RF300	50	390
	RF303	100	850
Pick-up voltage max, VDC		3.6	9.0



GENERAL NOTES

- Relays will exhibit no contact chatter in excess of 10 μ sec or transfer in excess of 1 μ sec.