THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

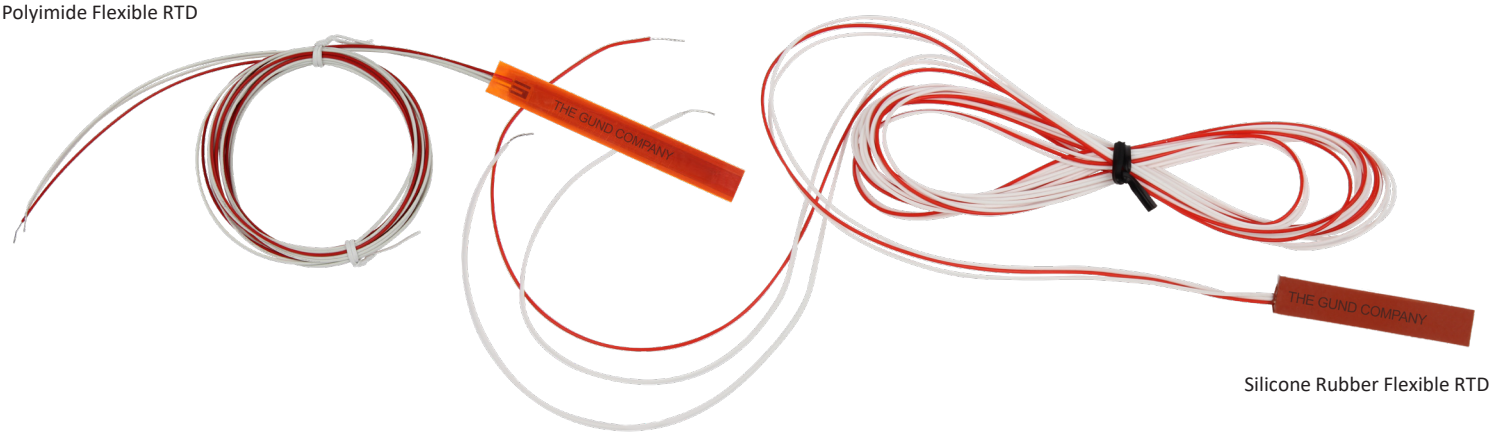
Flexible Resistance Temperature Detectors (RTDs)

Polyimide or Silicone Rubber

Embedded temperature monitoring of motors and generators is an industry-accepted practice that allows for continuous equipment condition assessment. Typically, this is done with RTD embedded in the stator windings or bearing. For some applications, the surface temperature needs to be monitored to measure the overall health of the motor or generator.

The Gund Company produces a flexible RTD in either Polyimide or Silicone Rubber that meets or exceeds industry standards.

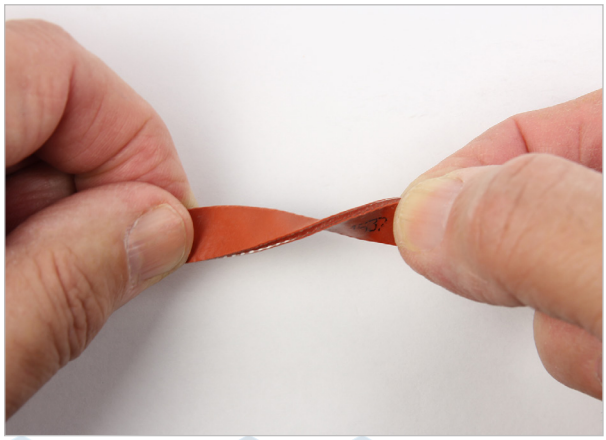
Polyimide Flexible RTD



Silicone Rubber Flexible RTD

	THE GUND COMPANY	Dimensions	Coating	Rating	Resistance	Element	Number of Elements	Wires	Gauge (Lead Wire)	Length (Lead Wire)	Coating (Lead Wire)
PART ID	RTDFA511.659.5P3243826PTT	2.00" x 0.375" x 0.125"	Silicone	Class H	100 Ωm ± 0.5% @ 0°C	Platinum	1	3	26 AWG	15 ft.	PTFE
	RTDFA31.750.76212.7P3457226PFT	1.20" x 0.50" x 0.03"	Polyimide	Class H	100 Ωm ± 0.5% @ 0°C	Platinum	1	3	26 AWG	15 ft.	PTFE

The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.



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Flexible Resistance Temperature Detectors (RTDs)

Installation Tips

Flexible RTDs lend themselves to a variety of installation methods. Avoid repeated bending during the installation process. Flexible RTDs will bend in use, but should be installed carefully to avoid excess stress.

Secure lead wires so they do not pull against sensor bodies. Lead wires should be routed along the sensed surface a short distance so that they do not sink heat away from the sensing element. Listed below are some standard installation methods.

PRESSURE-SENSITIVE ADHESIVE (PSA)

PSA is the simplest mounting method, but it is restricted to flat surfaces and temperatures below 177°C (350°F). During installation, PSA is usually applied to the mounting surface of the Flexible RTD. TGC does not offer this product (yet) but it can be acquired from your local industrial distributor.

#20 STRETCH TAPE

Use high-temperature silicone rubber tape for mounting to pipes or other cylinders (shown above). Tape typically comes in one-inch wide rolls and six or 36 feet long. This product is available at any industrial distributor.

#6 RTV CEMENT

Use room-temperature, vulcanizing cement to mount silicone rubber Flexible RTDs to flat or curved surfaces. This product is available at any industrial distributor.

IT IS NOT RECOMMENDED to put RTDs between windings or under tie cords at the end of winding bundles.
This installation method adds stress to the element and may break the element wire - causing the RTD to fail at installation.

FLEXIBLE RTDS FOR PIPE SENSING

Flexible RTDs make a practical, economical alternative to traditional immersed sensors for sensing fluid temperatures in pipes or tanks. They mount directly on pipe surfaces, so there is no need to tap and drain systems to install thermowells. If the Flexible RTD is installed correctly, tests show that the thermal response is as quick and accurate as traditional invasive sensors. We suggest using either #20 Stretch Tape or #6 RTC Cement (noted above).

THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

MARKETS


Switchgear


Electronics


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Motor Applications


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Electric Vehicles


Military/Aerospace


Oil & Gas


Medical


Space

OUR EXPERTISE IS YOUR COMPETITIVE ADVANTAGE

The Gund Company provides a wide range of material solutions from rigid, glass epoxy composites to high-temperature, silicone sponges.

We take a consultative approach to understanding your application by working with your engineers and buyers to find materials that fit the application. By understanding the most important material properties, we often find cost-reduction opportunities. Our Application Engineering Teams have decades of material experience and look forward to working with you on your upcoming project.

Material Families:

- Thermoset Rigid Laminates and Composites
- Flexible Laminates, Papers, Films, and Felts
- Thermoplastic Materials
- Elastomeric Materials

Our Engineering Capabilities Include:

- Custom Material Development
- Resin Formulation
- Laboratory Testing
- Comparative Materials Evaluation

Our Manufacturing Capabilities Include:

- Compression Molding
- Pultrusion
- Filament & Convolute Wound Tube
- Infusion & B-Stage Composites Lay-up and Molding
- Injection Molding
- Extrusion of Thermoplastics

THE GUND COMPANY GLOBAL FOOTPRINT – LOCAL SERVICE