Discoil[™] Thermal-Ribbons

Overview

Install these compact sensors anywhere for accurate point sensing. Discoil[™] RTD elements are wound on a single plane for faster time response.

Specifications

Dimensions W x L x T _{max}	Element options	Insulation	Temperature range	Leadwires	Time constant*	Features	Model
0.79 x 1.87 x 0.055" (20 x 47.5 x 1.4 mm) solder pad version shown	PD, PE	Polyimide (clear polyester available)	-73 to 200°C -100 to 392°F	(Optional) AWG 24, PTFE insulat- ed	0.10 sec.	Only 0.010" thick over element, fast time response, plat- inum PD accuracy available	S17422
1.00 x 1.25 x 0.090" (25.4 x 31.8 x 2.3 mm)	PB11, PB22	Silicone rubber with polyimide backing	-62 to 220°C -80 to 428°F	AWG 24, silicone rubber insulated	0.2 sec.	High temperature rating, platinum PD accuracy available	532
PD12, PE22	PD12, PE22						S385
1.00 x 1.25 x 0.065" (25.4 x 31.8 x 1.7 mm)	FA	Polyimide	-200 to 200°C -328 to 392°F	AWG 26, PTFE insulated	0.15 sec.	High resistance nickel-iron element	S39

Notes: T_{max} is measured over the lead bulge. *Time constant is in water at 1 m/sec.

Sensing elements

Sensing element specific	Code	
Platinum (0.00391 TCR)	100 Ω ±0.5% at 0°C	PA
Platinum (0.00391 TCR)	100 Ω ±0.11% at 0°C	PB11
Platinum (0.00391 TCR)	100 Ω ±0.22% at 0°C	PB22
Platinum (0.00385 TCR) (EN60751, Class B)	100 Ω ±0.12% at 0°C	PD, PD12
Platinum (0.00385 TCR)	100 Ω ±0.36% at 0°C	PE (Discoil)
Platinum (0.00385 TCR)	100 Ω ±0.5% at 0°C	PE (Strip sensing)
Platinum (0.00385 TCR)	100 Ω ±0.22% at 0°C	PE22
Nickel-iron (0.00518 TCR)	604 Ω ±0.26% at 0°C	FA
Copper 427	10 Ω ±0.20% at 25°C	CA
Nickel 672	120 Ω ±0.3% at 0°C	NA

** See table above for element options on each model.

Specification and order options

S32	Model number from table		
PB22	Sensing element from table		
Z	Number of leads: Y = 2 leads Z = 3 leads X = 4 leads W = Solder pads (S17422 only)		
36	Lead length in inches (Specify 0 for solder pads, option on S17422 only)		
A	Adhesive backing: A = No adhesive B = Pressure-sensitive adhesive (PSA)		
S32PB22	S32PB22Z36A = Sample part number		

Notes: PSA reduces temperature range to -20 to 177°C (-4 to 350°F) and adds 0.005" (0.1 mm) to thickness.