



MAGNEFLEX

MagneFlex features aluminum conductors insulated with a high temperature engineered resin. The advanced polymer coatings have been very successful in transformer applications.

Rea Material Code:

SRADAL

Rea Insulation Code: **6R**

Insulation Material

Description: **Poly Phenyl Sulfone**

Thermal Class: **200**

Shape: **Round**

Conductor: **Aluminum**

MARKETS

Transformers:

General

Utility Distribution

Transformers

Utility Power

Transformers

Specialty Transformers

TYPICAL APPLICATIONS

Utility transformers

FEATURES AND BENEFITS

- Provides uniformity of insulation thickness
- Excellent resistance to stress cracking
- Excellent dielectric properties
- Up to 100% reduction in test failures
- Increased winding speeds
- Lower water absorption
- Lower total unit cost
- Extremely durable
- Easy to strip

Edge Contours

Radius corner Full round

AVAILABILITY

Heavy

2-6 AWG

TYPICAL PROPERTIES

All values noted are typical on square or rectangular conductors. Actual properties of individual lots will vary within specification limits.

THERMAL

Heat Shock (20% 3X)

Pass 15% Elongation
@ 220°C

Pass 30% Elongation
@ 220 °C

Transition Temperature

220°C/428°F

Operating Temperature

200°C/392°F

Thermal Conductivity

2.42 Btu-in/hr-ft² °F
.35W/mk

MECHANICAL

Tensile	ksi	Mpa
Strength	10.1	70
Elongation @ break (23°C)	60-120%	
Flexural Modus	ksi	Mpa
	350	2400
Flexibility		
	15 percent	

ELECTRICAL

Dielectric Breakdown	
@ 3 mil per side	3-8 kV
Dielectric Constant	
@ 60Hz	3.44
@ 1kHz	3.45
Volume Resistivity	
	>10 ¹⁵ ohm-cm
Dissipation Factor	
@ 60Hz	0.0006

CHEMICAL

Specific Gravity	
	1.29
Water Absorption @ 24 hr	
	0.0037
Insulation Thickness	
	6-8mils/0.1016-0.254 mm