



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:
SRAD1350

Rea Insulation Code: **6R**

Insulation Material
Description: **Poly Phenyl Sulfone**

Thermal Class: **200**

Shape: **Shaped**

Conductor: **Aluminum**

NEMA Specification: **MW 18-A**

UL Number: **E130577**

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

Rectangle Availability	
Min. Width	.125
Max. Width	.700
Min. Thickness	.075
Max. Thickness	.350

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-ft ² °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
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Water Absorption @ 24 hr

0.0037

Insulation Thickness

6-8mils/0.1016-0.254 mm