

APPLICATIONS

Typical Applications

Dry-type transformers, traction motors, DC field coils, submersible pump motors

Very high temperature coils and relays

Encapsulated coils

Hermetically sealed relays

PRODUCT DESCRIPTION

Thermal Class: 240

Extraordinary thermal and chemical stability

Highest overload resistance, cut thru resistance and operating temperature classification of any Rea film insulation

Exhibits high resistance to radiation

Minimum outgassing makes ML ideal for use in hermetically sealed coils and relays

Chemically compatible with the widest range of solvents, varnishes and encapsulating materials

GENERAL INFORMATION

References are provided for comparative purposes

Round

NEMA: MW 16-C, MW 71-C

UL: File No. E37683

Square & Rectangular

NEMA: MW 20-C

UL: File No. E37683

Availability

Round

Single, Heavy 14-31 AWG

Square 2-10 AWG

Rectangular

Min width .162"

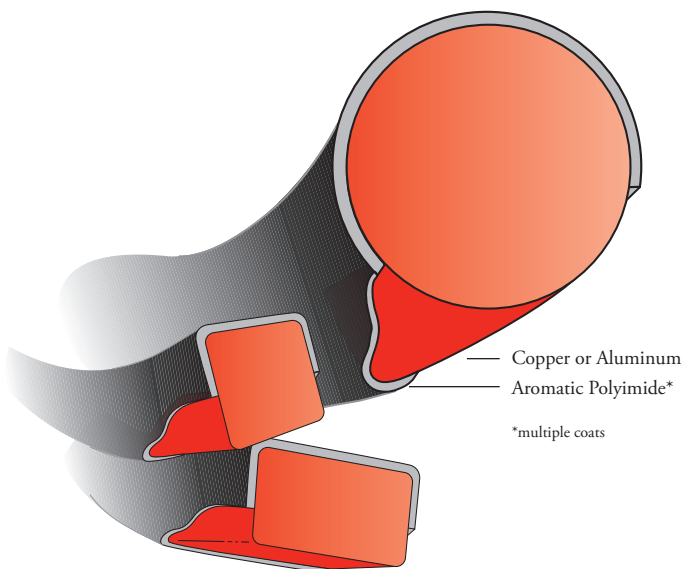
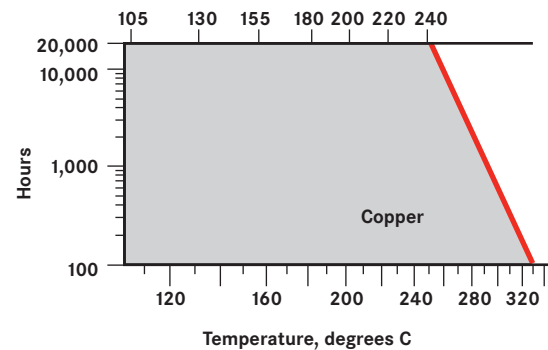
Max width .575"

Min thickness .061"

Max thickness .288"

MEASURED THERMAL ENDURANCE

18 AWG, Heavy Build Insulation



TYPICAL PROPERTIES

This data is typical of 18 AWG copper, heavy build insulation only. It is not intended to be used to create specification limits.

**THERMAL****Thermal Endurance** (*)

20,000 hr Life: >240°C

Thermoplastic Flow

Min: 450°C

typical: 500+°C

Heat Shock (20% 3x)

1/2 hr @ 280°C min: no cracks

Stress Relief Temp: 200°C**MECHANICAL****Mandrel Flexibility**

After Elongation min: 20% 3x OK
typical: 30% 1x OK

After Snap min: 3x OK
typical: 1x OK

Unilateral Scrape

Avg. of 3 sides min: 1150 gms
typical: 1500 gms

**ELECTRICAL****Dielectric Breakdown**

@ RT: 12 kV

@ 220°C: 7 kV

High Voltage Continuity

NEMA @ 1500 V DC: 5 faults/100 feet max
typical @ 2000 V DC: 0-1 faults/100 feet

**CHEMICAL****Resistance to Solvents**

After 24 hrs @ RT: Pass,

Solvents Including:

Xylene
50/50 Cellosolve/Xylene,
Perchloroethylene,
1% NaOH
28% Sulfuric Acid
Freon TMS

Procedure followed to determine published value:

NEMA = National Electrical Manufacturers Association

JIS = Japanese Industrial Standards

IEC = International Electrotechnical Commission

ASTM = American Society for Testing and Materials