



Thorndike Corporation

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Bulletin No.: 111-3000

Material: TC3000

MATERIAL CHARACTERISTICS

Test Frequency:	10.0 GHz
Attenuation:	>68.5 dB / cm at 10 GHz >11.8 dB / cm at 3 GHz
Relative Permeability:	2.45
Relative Permittivity:	18.0 with a 5% tolerance
Loss Factor dB/inch:	174
Resistivity:	>10E12 ohm cm
Thermal Expansion:	30 x 10E-6 per degrees C.
Outgassing Characteristics:	See note 1 below
Color:	Brown to Black
Dielectric Strength:	>380 kv/in
Operating Temperature Range:	to 350 degrees F.
Tensile Strength:	>7500 psi
Water Absorption:	<0.05% (20 days @ 25 deg. C.)
Machinability:	Excellent

Note 1:

NASA CRITERIA FOR SPACE MATERIAL ACCEPTANCE

- TML less than or equal to 1.0%
- CVCM less than or equal to 0.10%

Outgassing characteristics:

- 24 hr period at 125 deg. C. Vacuum of 10E-6 torr total weight loss, .238%
- Volatile condensable materials 0.008% on sample 1-3/16 x .060 in. thick

CALL THORNDIKE CORPORATION FOR ALL YOUR LOW AND HIGH POWER ABSORBER REQUIREMENTS!!!

