ROGERS CORPORATION

PORON® Polyurethanes

Elastomeric Material Solutions
www.rogerscorp.com

Typical Product Properties

PORON® 4701-V0-M Medium – Data Sheet

PROPERTY	TEST METHOD	VALUE
PHYSICAL		
Density, kg /m³ (lb. / ft³) Tolerance, %	ASTM D 3574-95, Test A	400 (25) ± 10
Thickness, mm (inches) Tolerance, %		5 (0.197) | 6 (0.236) ± 10
Standard Color (Code)		Smoke Gray (107)
Compression Force Deflection, kPa (psi)	0.51 cm/mm (0.2" / min)Strain Rate Force Measured @ 25% Deflection	41-110 (6-16)
Hardness, Durometer, Shore "OO",	ASTM D 2240-97	24
Compression Set, % max.	ASTM D 3574-95 Test D @ 23˚C (73˚) ASTM D 3574-95 Test D @ 70˚C (158˚F)	5 10
Tensile Strength, Min. kPa (psi)	ASTM D 3574-75 Test E	580 (84)
Tensile Elongation, % min.,	ASTM D 3574-75 Test E	55
ELECTRICAL AND THERMAL		
Dielectric Constant, K' ("DK")	ASTM D 150 at RT	~4.0 at 20 Hz (~2.6 at 1x10⁶ Hz)
Dielectric Strength, volts/mil	ASTM D 149	1.5
Volume Resistivity, ohm-cm (Dry and 90% RH)	ASTM D 257-99	~10¹¹
Surface Resistivity, ohm/sq.	ASTM D 257-99	~10¹¹
Thermal Conductivity, W/m-K	ASTM 1530 at RT	0.292
Coefficient of Thermal Expansion, mm/mmC	TMA at 5°C/min heating rate	0.00031
Heat Capacity, J/cm³ K	ISO/DIS 22007-2.2 (Hot Disk)	0.59

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TEMPERATURE RESISTANCE		
Recommended Constant Use, max.	SAE J-2236 for 1008 hrs.	90˚C (194˚F)
Recommended Intermittent Use, max.	SAE J-2236 for 168 hrs.	121˚C (250˚F)
Embrittlement	ASTM D 746-13	-20˚C (-4˚F)
Cold Flexibility	MIL-P-12420 D at -40˚C (-40˚F)	Pass
FLAMMABILITY		
Flame Resistance	UL 94 V-0 UL 94 HF-1 FMVSS 302	Pass Pass Pass
ENVIRONMENTAL/OFFGASSING		
RoHS 2.0 Testing SGS Report		Pass
Water Absorption, Immersion Testing High Humidity	ASTM D 570 AMS 3568B	25 <2
REACH Compliance		Pass

Notes:

- All metric conversions are approximate.
- Additional technical information is available.
- Typical values should not be used for specification limits.