

BISCO® HT-6220

BISCO® HT-6220 soft silicone material is a part of the performance grade solid silicone series. The material's low Shore A durometer, high tear strength, and extremely tight thickness tolerances offer added benefits for sealing.

Features & Benefits:

- Provides low closure force
- Bridges the gap between foams and high durometer solids

| PROPERTY | TEST METHOD | TYPICAL VALUE* | SPECIFICATION** |
|-----------------------------|-------------------------------------------|---------------------------------|-----------------|
| PHYSICAL | | | |
| Color | Visual | Black | |
| Thickness, mm (inches) | Internal | 0.250 - 3.18 (0.013 - 0.125) | |
| Specific Gravity, (g/cc) | Internal | 1.08 | |
| Durometer, Shore A | ASTM D2240 | 20 | 22 ± 5 |
| Compression Set, % | ASTM D395 150°C (302°F) / 70 hrs / 25% | < 25 | |
| Tensile Strength, MPa (psi) | ASTM D412 | 4.4 | > 3.45 |
| | | (640) | (> 500) |
| Elongation, % | ASTM D412 | 580 | > 400 |
| Tear Resistance, ppi | ASTM D624 | 116 | > 40 |

Specification values in bold are tested on a batch basis.

Further industry specifications tested in tables below.

| PROPERTY | TEST METHOD | TYPICAL VALUE* | SPECIFICATION** |
|--------------------------------|-------------|----------------|-----------------|
| ELECTRIC | | | |
| Dielectric Strength, Volts/mil | ASTM D149 | 374 | |
| Dielectric Constant, 1 kHz | ASTM D150 | 2.97 | |
| Dissipation Factor, 1 kHz | ASTM D495 | 0.003 | |
| Dry Arc Resistance, Seconds | ASTM D495 | 123 | |
| Volume Resistivity, Ohm-cm | ASTM D257 | 10^14 | |





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|------------------------------|-------------------------------------|------------------------------|-----------------|
| THERMAL | | | |
| Temperature Range, °C (°F) | Internal | -55 to +200 (-67 to +392) | |
| Thermal Conductivity, W/m °K | ASTM D518 | 0.22 | |
| Low Temperature Brittleness | ASTM D2137 -62°C (-80°F) / 3 min | Pass | |

Standard Thickness Tolerances

| NOMINAL THICKNESS | TOLERANCE |
|-------------------|-------------------|
| mm (inches) | mm (inches) |
| 0.254 | ± 0.051 |
| (0.010) | (± 0.002) |
| 0.508 | + 0.076/- 0.051 |
| (0.020) | (+ 0.003/- 0.002) |
| 0.787 | ± 0.102 |
| (0.031) | (± 0.004) |
| 1.600 | ± 0.152 |
| (0.063) | (± 0.006) |
| 3.175 | ± 0.203 |
| (0.125) | (± 0.008) |

Width Tolerances

| NOMINAL WIDTH | TOLERANCE | |
|----------------------------|-------------------------|--|
| mm (inches) | mm (inches) | |
| > 660 - 914 (> 26 - 36) | + 25.4/- 0 (+ 1/- 0) | |

Notes:



^{*}Typical Value- Value is based on historical data. Please note the frequency of testing varies.

**Specification- Applies to physical properties only, which are based on Rogers' internal benchmark and standard BISCO specification values. Additional industry specifications are available as well. All other properties are based on industry standard guidelines. All metric conversions are approximate. Reference US customary units for official values and tolerances.