

Comparative Properties Extruded Materials

General Description									
EcE Material Reference (Type)			1A/1	1B/1	1B/2	1D/1	1I/1	1I/3	1J/2
Elastomer Type (Sil - Silicone, F/Sil - Fluorosilicone)			Sil	Sil	Sil	Sil	Sil	Sil	Sil
Filler Material (Silver on Aluminium,Nickel,Copper,Glass & Nickel Graphite)			Ag/Ni	Ag/Cu	Ag/Cu	Ag/Al	Ag/Glass	Ag/Glass	Ni/Gr
Colour			Tan	Tan	Tan	Tan	Tan	Tan	Grey
Electrical Properties	Tol	Test Method							
Volume Resistivity (ohm.cm) (as supplied)	Max		0.047	0.005	0.008	0.008	0.050	0.005	0.050
Shielding Effectiveness (dB)		MIL-G-83528 MIL 285	70	70	70	70	50	55	70
200 KHz (H-Field)			105	115	115	110	65	95	95
100 MHz (E-Field)			105	115	115	105	70	95	90
500 MHz (E-Field)			100	115	115	100	70	95	90
2 GHz (Plane Wave)			100	115	115	100	65	95	90
10 GHz (Plane Wave)									
Physical Properties									
Specific Gravity (g/cmΔ)	±5%	ASTM D-792	4.32	3.32	3.02	2.11	1.85	1.80	2.45
Hardness (Shore A)	± 5	ASTM D-2240	65	75	61	70	65	65	80
Tensile Strength (MPa)	Min	ASTM D-412	1.25	1.25	1.00	0.90	0.55	0.35	2.00
Elongation (%)	Min	ASTM D-412	100	100	100	100	60	75	150
Compression Set (%)	Max	ASTM D-395	30	30	30	30	30	30	30
Upper Operating Temperature (°C)	-		160	125	125	160	160	160	160
Lower Operating Temperature (°C)	-	ASTM D-1329	-50	-50	-50	-50	-50	-50	-50

General Description									
EcE Material Reference (Type)			1J/3	1I/4	1D/2	2A	2B	2D	2J
			New Materials						
Elastomer Type (Sil - Silicone, F/Sil - Fluorosilicone)			Sil	Sil	Sil	F/Sil	F/Sil	F/Sil	F/Sil
Filler Material (Silver on Aluminium,Nickel,Copper,Glass & Nickel Graphite)			Ni/Gr	Ag/Glass	Ag/Al	Ag/Ni	Ag/Cu	Ag/Al	Ni/Gr
Electrical Properties	Tol	Test Method							
Volume Resistivity (ohm.cm) (as supplied)	Max		0.100 - 0.500	0.050 - 0.100	0.008	0.005	0.005	0.010	0.050
Shielding Effectiveness (dB)		MIL-G-83528 MIL 285	70	55	70	75	75	70	70
200 KHz (H-Field)			95	95	100	110	110	110	100
100 MHz (E-Field)			90	90	100	110	120	105	100
500 MHz (E-Field)			90	90	100	105	120	100	100
2 GHz (Plane Wave)			90	90	100	100	120	100	100
10 GHz (Plane Wave)									
Physical Properties									
Specific Gravity (g/cmΔ)	±5%	ASTM D-792	1.99	1.75	2.00	4.60	5.00	2.70	3.25
Hardness (Shore A)	± 5	ASTM D-2240	60	60	65	80	75	70	80
Tensile Strength (MPa)	Min	ASTM D-412	1.00	0.90	0.90	1.25	1.25	0.55	0.75
Elongation (%)	Min	ASTM D-412	100	80	175	100	100	100	100
Compression Set (%)	Max	ASTM D-395	30	30	30	30	30	30	30
Upper Operating Temperature (°C)	-		160	160	160	160	125	160	160
Lower Operating Temperature (°C)	-	ASTM D-1329	-50	-50	-50	-50	-55	-55	-55