

■ Typical Properties of Isotropic Graphite

Grade	Bulk Density	Hardness	Electrical Resistivity	Flexural Strength	Compressive Strength	Tensile Strength	Young's Modulus	Coefficient of Thermal Expansion	Thermal Conductivity	Standard Size	
	Mg/m ³	HSD	$\mu\Omega\cdot m$	MPa	MPa	MPa	GPa	10 ⁻⁶ /K	W/(m·K)	(mm)	
IG-11	1.77	51	11.0	39	78	25	9.8	4.5	120	305×620×1000	D585×1050
IG-12	1.78	55	12.5	39	88	28	10.8	4.7	100	305×620×1000	D585×1050
IG-15	1.90	60	9.5	54	103	29	11.8	4.8	140	230×620×1000	
IG-19	1.75	60	17.0	38	88	25	9.5	4.6	80	D585×1050	
IG-43	1.82	55	9.2	54	90	37	10.8	4.8	140	300×540×850	
IG-45	1.88	55	9.0	60	110	40	12.0	4.9	140	300×540×850	
IG-56	1.77	57	12.2	43	88	27	10.3	4.7	100	1050×1050×450	D760×700
IG-70	1.83	58	10.0	47	103	31	11.8	4.6	130	305×620×1000	D460×1050
ISEM-1	1.68	45	13.5	36	69	20	8.8	4.2	90	305×620×1000	
ISEM-2	1.78	55	11.0	41	83	25	9.8	4.6	120	305×620×1000	
ISEM-3	1.85	60	10.0	49	103	29	11.8	5.0	130	305×620×1000	
ISEM-8	1.78	63	13.4	52	106	34	10.1	5.6	90	305×620×1000	
ISO-63	1.78	76	15.0	65	135	46	12.0	5.6	70	230×540×1000	
ISO-66	1.82	75	14.4	70	134	46	12.6	7.1	80	180×450×850	
ISO-68	1.82	80	15.5	76	172	54	13.2	5.6	70	230×540×1000	
ISO-88	1.90	90	15.5	93	181	69	12.7	6.5	70	100×300×600	
SIC-6	1.85	60	10.0	49	103	29	11.8	5.0	130	305×620×1000	
SIC-12	1.77	65	14.1	47	93	29	10.8	5.0	80	305×620×1000	
TTK-4	1.78	72	14.0	73	135	49	10.9	5.0	90	210×510×950	
TTK-5	1.78	80	15.5	80	150	53	11.6	5.7	80	210×510×950	
TTK-50	1.80	70	13.0	60	130	40	11.5	5.1	100	305×620×1000	

※ The figures above are typical values, and are not guaranteed.

※ The measurement temperature range for the coefficient of thermal expansion is 350 to 450°C.

※ Unit conversion: $\mu\Omega\cdot m = \mu\Omega\cdot cm \times 0.01$ $MPa = kgf/cm^2 \times 0.098$ $GPa = kgf/mm^2 \times 0.0098$ $W/(m\cdot K) = kcal/h\cdot m\cdot ^\circ C \times 1.16$

※ There are other product sizes in addition to those described above.

※ Size or specification of material may be changed without notice.

※ Standard size is nominal dimension.