Bonded Magnets

Compression/Injection Molding NdFeB/Ferrite Magnets

Bonded Magnets are typically manufactured via compression or injection molding processes, with NdFeB and ferrite being the dominant magnetic components. They are widely used in automotive applications, such as: oil pump motors, window lift motors, car seat motors, auto fan motors, wiper motors, sensors, and micro-motor applications. These magnets are also used in: computers, home applications, office automation and electric tools.

Bonded magnets are typically used anywhere Br can be sacrificed for very tight physical & magnetic properties. They exhibit high structural integrity, high resistance to corrosion, and can be made into complex shapes.

1120 Ringwood Ct, San Jose, CA 95131
www.labmagnetics.com, info@labmagnetics.com

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Magnetic Properties of Bonded Magnets

Item	Grade	Remanence		Ccercivity				Max Energy Product		Max Working Temperature	Density
		B_r		H_{cB}		H_{cJ}		$(BH)_{max}$		T_wMax	ρ
		T	kGs	kA/m	kOe	kA/m	kOe	kJ/m³	MGOe	°C	g/cm³
Compression Molding NdFeB Magnet	KBM-2	0.30~0.40	3.0~4.0	160~240	2.0~3.0	480~640	6.0~8.0	16~24	2.0~3.0	≤120	4.5~6.0
	KBM-4	0.40~0.50	4.0~5.0	240~320	3.0~4.0	560~720	7.0~9.0	32~44	4.0~5.5	≤120	5.2~6.0
	KBM-6	0.50~0.60	5.0~6.0	320~400	4.0~5.0	480~640	6.0~8.0	48~60	6.0~7.5	≤120	5.5~6.0
	KBM-8	0.60~0.68	6.0~6.8	360~440	4.5~5.5	640~800	8.0~10.0	64~72	8.0~9.0	≤150	5.8~6.1
	KBM-8H	0.60~0.65	6.0~6.5	400~480	5.0~6.0	1120~1280	14.0~16.0	60~68	7.5~8.5	≤160	5.8~6.2
	KBM-8L	0.65~0.68	6.5~6.8	400~480	5.0~6.0	900~1120	11.0~14.0	64~72	8.0~9.0	≤160	5.8~6.2
	KBM-9	0.60~0.68	6.0~6.8	400~480	5.0~6.0	640~800	8.0~10.0	68~72	8.5~9.0	≤150	5.8~6.2
	KBM-10	0.68~0.73	6.8~7.3	400~480	5.0~6.0	640~800	8.0~10.0	76~84	9.5~10.5	≤150	5.8~6.2
	KBM-12	0.71~0.75	7.1~7.5	440~520	5.5~6.5	720~800	9.0~10.0	84~96	10.5~12.0	≤150	6.0~6.2
	KBM-12L	0.72~0.76	7.2~7.6	400~480	5.0~6.0	480~640	6.0~8.0	84~96	10.5~12.0	≤140	6.0~6.2
Injection Molding NdFeB Magnet	KBI-3	0.20~0.30	2.0~3.0	160~240	2.0~3.0	480~640	6.0~8.0	12~24	1.5~3.0	≤100	3.9~4.4
	KBI-4	0.35~0.45	3.5~4.5	240~320	3.0~4.0	560~720	7.0~9.0	24~36	3.0~4.5	≤120	4.2~4.9
	KBI-5	0.45~0.52	4.5~5.2	320~360	4.0~4.5	560~720	7.0~9.0	36~44	4.5~5.5	≤120	4.5~5.0
	KBI-5H(PPS)	0.48~0.52	4.8~5.2	400~480	5.0~6.0	880~1040	11.0~13.0	36~44	4.5~5.5	≤150	4.9~5.4
	KBI-6	0.50~0.55	5.0~5.5	320~440	4.0~5.5	640~800	8.0~10.0	44~52	5.5~6.5	≤120	4.7~5.1
	KBI-7	0.54~0.64	5.4~6.4	320~400	4.0~5.0	640~800	8.0~10.0	52~60	6.5~7.5	≤120	5.0~5.5
	KBI-8	0.64~0.74	6.4~7.4	400~480	5.0~6.0	640~800	8.0~10.0	68~76	8.5~9.5	≤120	5.5~5.9
Injection Molding Ferrite Magnet	KBI-F1.5	0.22~0.24	2.2~2.4	160~167	2.00~2.10	231~240	2.90~3.00	11.6~12.4	1.45~1.55	≤120	3.25
	KBI-F1.9	0.27~0.29	2.7~2.9	180~186	2.25~2.33	216~228	2.70~2.85	14.8~15.6	1.85~1.95	≤120	3.63
	KBI-F2.0	0.28~0.29	2.8~2.9	184~200	2.30~2.50	216~246	2.70~3.10	15.6~16.4	1.95~2.05	≤120	3.7
	KBI-F2.1	0.28~0.29	2.8~2.9	190~204	2.38~2.55	224~249	2.80~3.12	16.4~17.2	2.05~2.15	≤120	3.75
	KBI--F1.7(PPS)	0.25~0.26	2.5~2.6	167~175	2.10~2.20	208~216	2.60~2.70	13.6~14.0	1.70~1.75	≤160	3.65

1. The above-mentioned data of magnetic parameters and physical properties are given at room temperature.
2. The above values also have relationship to products shapes and dimensions. It is recommended that the final test data to be fixed on actual products.
3. For other special magnetic parameters, please contact us, and we can make them to your specifications.

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