

Ferrite Cores for EMI Suppression

Ferrite Beads

BB Series(1 Hole)

Bead cores series are easy to handle and are supplied in various materials, shapes and packaging styles to meet for users' requests.

FEATURES

- Appropriate materials and shapes can be selected from various cores to suppress EMI effectively.

APPLICATIONS

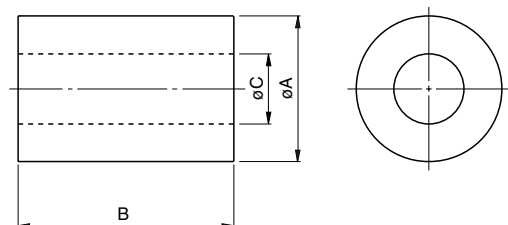
Video, acoustic, office automation equipment, communication equipment, automotive electronic equipment and others.

- Absorption EMI and penetrating noise
- Prevent parasitic oscillation

MATERIAL CHARACTERISTICS

Material	Initial permeability μ_i	Temperature factor of initial permeability $\alpha_{\mu i} \times 10^{-6}/^{\circ}\text{C}$	Curie temperature T_c ($^{\circ}\text{C}$)	Saturation magnetic flux density B_s (mT)
HF70	1500	1 to 6	>100	280[H=1600A/m]
HF57	600	3 to 15	>150	370[H=4000A/m]
HF40	120	8 to 18	>250	410[H=4000A/m]
HF30	45	5 to 15	>300	320[H=4000A/m]

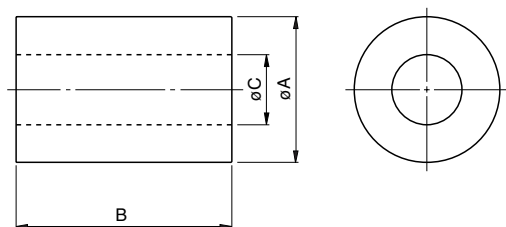
SHAPES AND DIMENSIONS/CHARACTERISTICS



Part No.	Dimensions (mm)			Impedance(Ω)[at 23 $^{\circ}\text{C}$]	
	A	B	C	10MHz typ.	100MHz typ.
HF30BB1.8X5X0.7	1.8 \pm 0.15	5.0 \pm 0.3	0.7 \pm 0.1	3.4	36
HF30BB2.5X2X0.8	2.5 \pm 0.15	2.0 \pm 0.2	0.8 \pm 0.1	1.9	20
HF30BB3X5X1	3.0 \pm 0.15	5.0 \pm 0.3	1.0 \pm 0.1	3.3	37
HF30BB3.5X5X1.3	3.5 \pm 0.15	5.0 \pm 0.3	1.3 \pm 0.1	3.2	32
HF30BB5X5X2	5.0 \pm 0.15	5.0 \pm 0.3	2.0 \pm 0.15	2.7	33
HF30BB6.4X5X3.2	6.4 \pm 0.2	5.0 \pm 0.2	3.2 \pm 0.15	2.6	26
HF40BB1.7X1.9X0.7	1.7 \pm 0.15	1.9 \pm 0.2	0.7 \pm 0.1	1.8	16
HF40BB3X5X1	3.0 \pm 0.15	5.0 \pm 0.3	1.0 \pm 0.1	9	60
HF40BB3.4X3X1	3.4 \pm 0.15	3.0 \pm 0.2	1.0 \pm 0.1	7	39
HF40BB3.5X5X1.3	3.5 \pm 0.15	5.0 \pm 0.3	1.3 \pm 0.1	9.1	50
HF40BB4.5X4X2.5-G	4.5 \pm 0.15	4.0 \pm 0.2	2.5 \pm 0.15	4.5	32
HF40BB4.5X5X1.6	4.5 \pm 0.15	5.0 \pm 0.3	1.6 \pm 0.1	11	60
HF40BB5X5X2	5.0 \pm 0.15	5.0 \pm 0.3	2.0 \pm 0.15	9.4	52
HF40BB5X6X2.5	5.0 \pm 0.15	6.0 \pm 0.3	2.5 \pm 0.15	10	50
HF40BB5.5X5X2.5	5.5 \pm 0.2	5.0 \pm 0.3	2.5 \pm 0.15	8.1	43
HF40BB6X3.8X3A-G	6.0 \pm 0.2	3.8 \pm 0.2	3.0 \pm 0.2	4	35
HF57BB2.85X2X1.35	2.85 \pm 0.1	2.0 \pm 0.15	1.35 \pm 0.1	8	23
HF57BB2.85X5X1.35	2.85 \pm 0.1	5.0 \pm 0.2	1.35 \pm 0.1	20	54
HF57BB3.35X2X2	3.35 \pm 0.2	2.0 \pm 0.1	2.0 \pm 0.2	6	20
HF57BB3.5X1X1.6	3.5 \pm 0.15	1.0 \pm , -0.2	1.6 \pm 0.1	4.5	17
HF57BB3.5X1.5X1.3	3.5 \pm 0.15	1.5 \pm 0.15	1.3 \pm 0.1	9	23
HF57BB3.5X3X1.3	3.5 \pm 0.15	3.0 \pm 0.2	1.3 \pm 0.1	16	40
HF57BB3.5X5X1.3	3.5 \pm 0.15	5.0 \pm 0.3	1.3 \pm 0.1	28	65
HF57BB3.6X3.2X2.7	3.6 \pm 0.15	3.2 \pm 0.2	2.7 \pm 0.15	6	17
HF57BB4X2X2	4.0 \pm 0.15	2.0 \pm 0.15	2.0 \pm 0.15	8	24
HF57BB4X5X2	4.0 \pm 0.15	5.0 \pm 0.3	2.0 \pm 0.15	19	46
HF57BB4.5X4X2.5	4.5 \pm 0.15	4.0 \pm 0.2	2.5 \pm 0.15	14	37
HF57BB4.8X4.8X2.4	4.8 \pm 0.2	4.8 \pm 0.2	2.4 \pm 0.15	18	49
HF57BB5X5X2	5.0 \pm 0.15	5.0 \pm 0.3	2.0 \pm 0.15	25	59

• All specifications are subject to change without notice.

SHAPES AND DIMENSIONS/CHARACTERISTICS

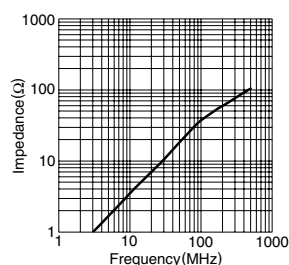


Part No.	Dimensions (mm)			Impedance(Ω)[at 23°C]	
	A	B	C	10MHz typ.	100MHz typ.
HF70BB1.8X5X0.7	1.8±0.15	5.0±0.3	0.7±0.1	31	48
HF70BB2.5X2.2X0.8	2.5±0.15	2.2±0.2	0.8±0.1	15	27
HF70BB2.5X5X0.8	2.5±0.15	5.0±0.3	0.8±0.1	31	51
HF70BB3X5X1	3.0±0.15	5.0±0.3	1.0±0.1	33	53
HF70BB3.4X3X1	3.4±0.15	3.0±0.2	1.0±0.1	22	36
HF70BB3.5X2X1.3	3.5±0.15	2.0±0.15	1.3±0.1	13	24
HF70BB3.5X5X0.8	3.5±0.15	5.0±0.3	0.8±0.1	40	68
HF70BB3.5X3X1.3	3.5±0.15	3.0±0.2	1.3±0.1	17	28
HF70BB3.5X5X1.3	3.5±0.15	5.0±0.3	1.3±0.1	29	49
HF70BB3.5X10X1.3	3.5±0.15	10.0±0.4	1.3±0.1	53	92
HF70BB4.5X4X2.5	4.5±0.15	4.0±0.2	2.5±0.15	17	30
HF70BB4.5X5X1.6	4.5±0.15	5.0±0.3	1.6±0.1	31	53
HF70BB4X15X1.35	4+0.1, -0.2	15.0±0.5	1.35±0.1	92	155
HF70BB5X5X2	5.0±0.15	5.0±0.3	2.0±0.15	27	42
HF70BB5.5X5X2.5	5.5±0.2	5.0±0.3	2.5±0.15	22	38
HF70BB6X3.8X3	6.0±0.2	3.8±0.2	3.0±0.2	19	31
HF70BB6.4X4.5X3.2	6.4±0.2	4.5±0.2	3.2±0.15	22	37
HF70BB6.4X5X3.2	6.4±0.2	5.0±0.2	3.2±0.15	20	32
HF70BB6.4X10X3.2	6.4±0.2	10.0±0.5	3.2±0.15	40	63
HF70BB9X5X4.5	9.0±0.25	5.0±0.3	4.5±0.15	20	34
HF70BB9X10X4.5	9.0±0.25	10.0±0.4	4.5±0.15	40	68
HF70BB9.5X10.4X4.9	9.52±0.25	10.42±0.25	4.9±0.15	40	70

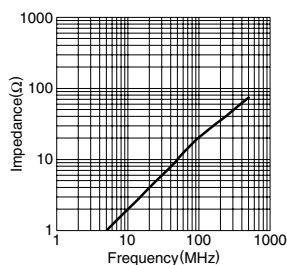
TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

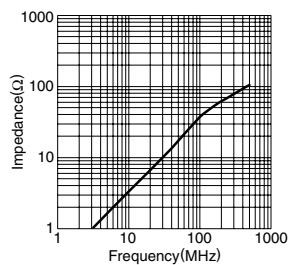
HF30BB1.8X5X0.7



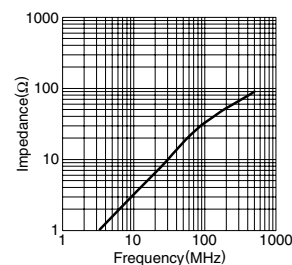
HF30BB2.5X2X0.8



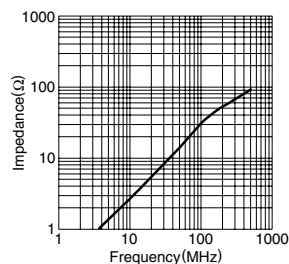
HF30BB3X5X1



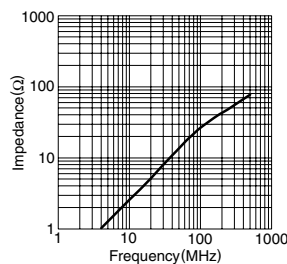
HF30BB3.5X5X1.3



HF30BB5X5X2



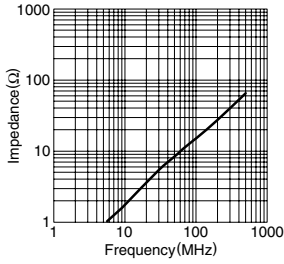
HF30BB6.4X5X3.2



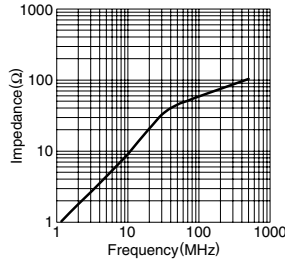
• All specifications are subject to change without notice.

TYPICAL ELECTRICAL CHARACTERISTICS
IMPEDANCE vs. FREQUENCY CHARACTERISTICS

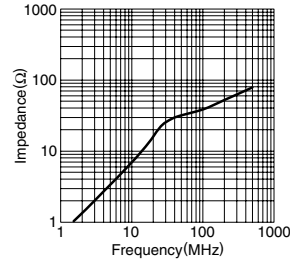
HF40BB1.7X1.9X0.7



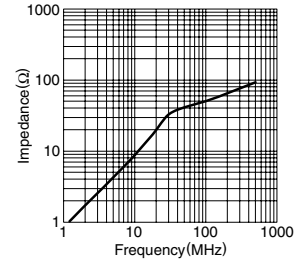
HF40BB3X5X1



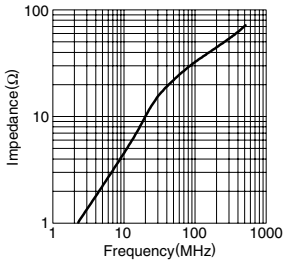
HF40BB3.4X3X1



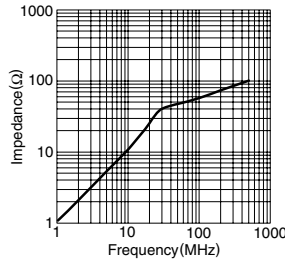
HF40BB3.5X5X1.3



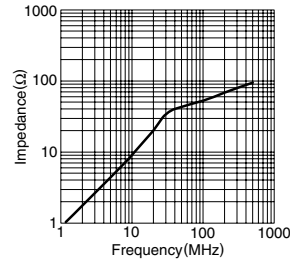
HF40BB4.5X4X2.5-G



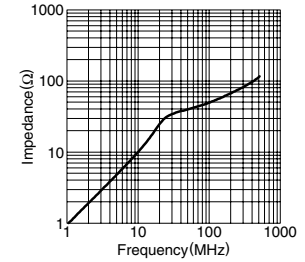
HF40BB4.5X5X1.6



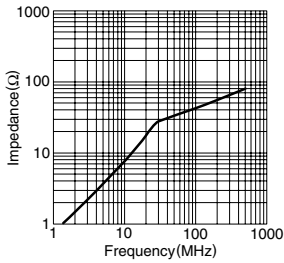
HF40BB5X5X2



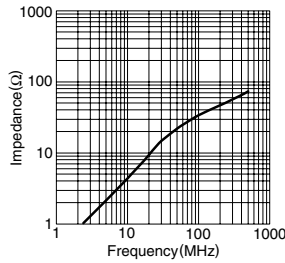
HF40BB5X6X2.5



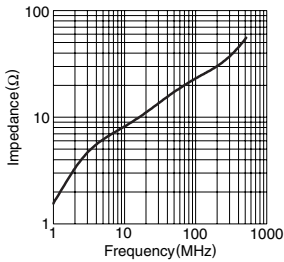
HF40BB5.5X5X2.5



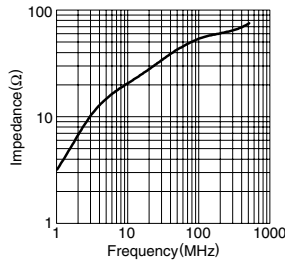
HF40BB6X3.8X3A-G



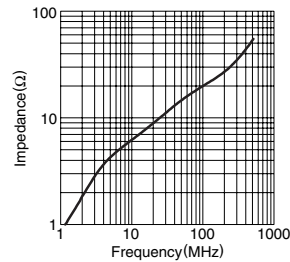
HF57BB2.85X2X1.35



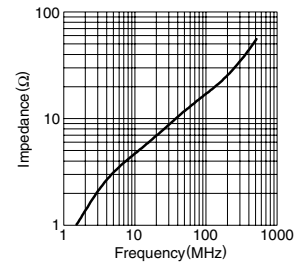
HF57BB2.85X5X1.35



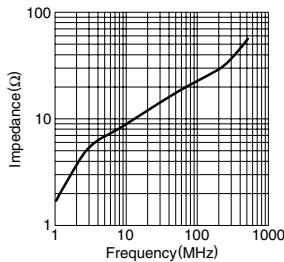
HF57BB3.35X2X2



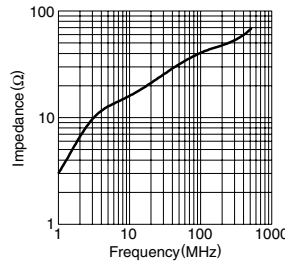
HF57BB3.5X1X1.6



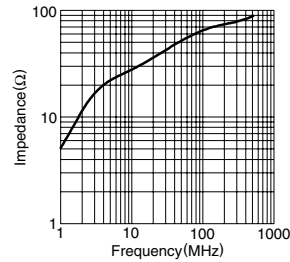
HF57BB3.5X1.5X1.3



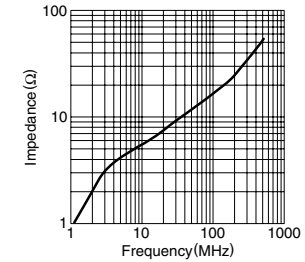
HF57BB3.5X3X1.3



HF57BB3.5X5X1.3



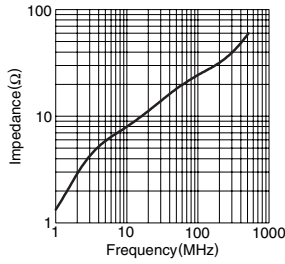
HF57BB3.6X3.2X2.7



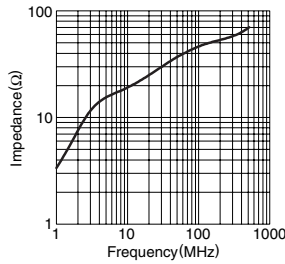
• All specifications are subject to change without notice.

TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

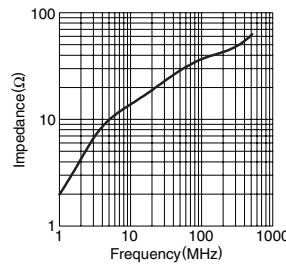
HF57BB4X2X2



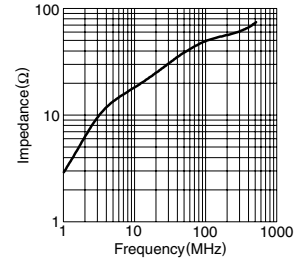
HF57BB4X5X2



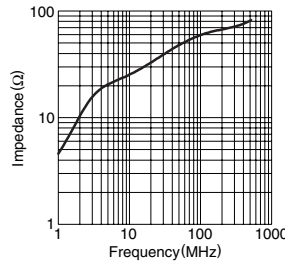
HF57BB4.5X4X2.5



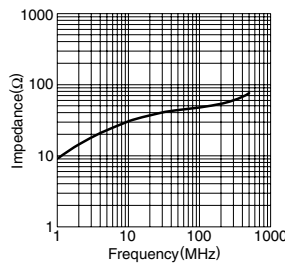
HF57BB4.8X4.8X2.4



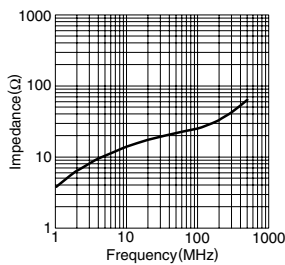
HF57BB5X5X2



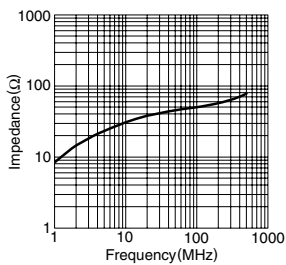
HF70BB1.8X5X0.7



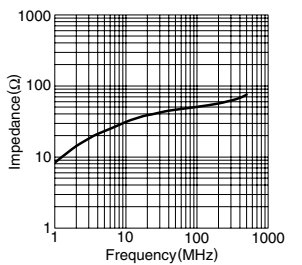
HF70BB2.5X2.2X0.8



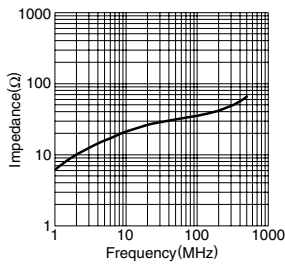
HF70BB2.5X5X0.8



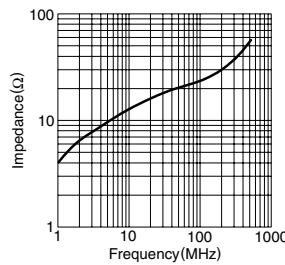
HF70BB3X5X1



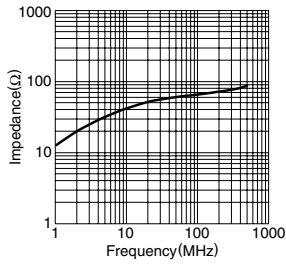
HF70BB3.4X3X1



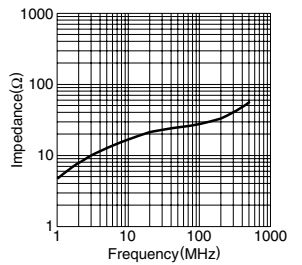
HF70BB3.5X2X1.3



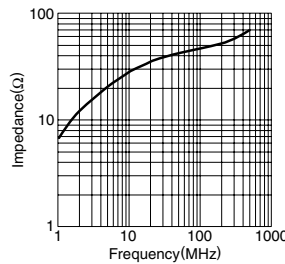
HF70BB3.5X5X0.8



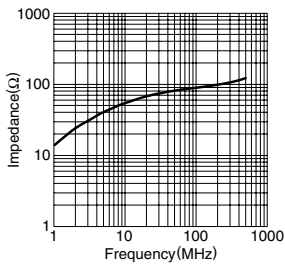
HF70BB3.5X3X1.3



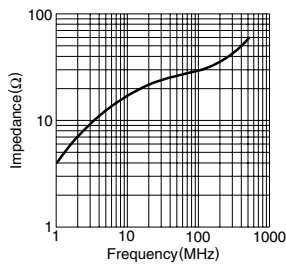
HF70BB3.5X5X1.3



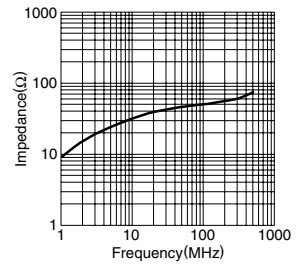
HF70BB3.5X10X1.3



HF70BB4.5X4X2.5



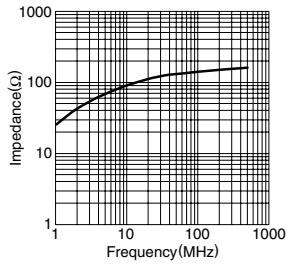
HF70BB4.5X5X1.6



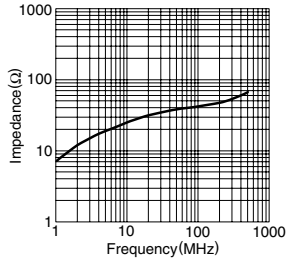
• All specifications are subject to change without notice.

TYPICAL ELECTRICAL CHARACTERISTICS
IMPEDANCE vs. FREQUENCY CHARACTERISTICS

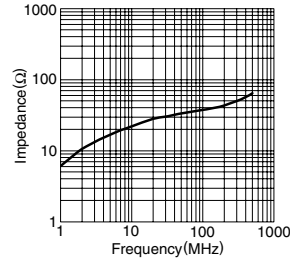
HF70BB4X15X1.35



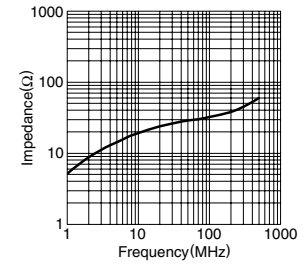
HF70BB5X5X2



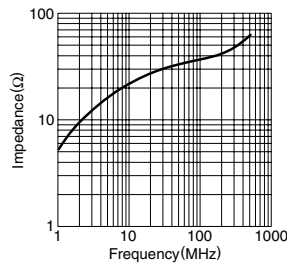
HF70BB5.5X5X2.5



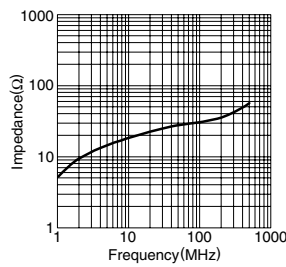
HF70BB6X3.8X3



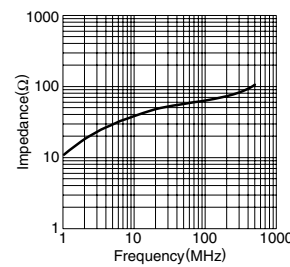
HF70BB6.4X4.5X3.2



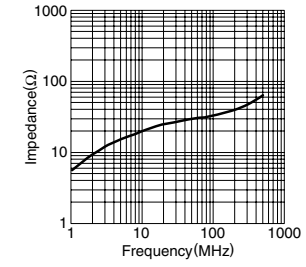
HF70BB6.4X5X3.2



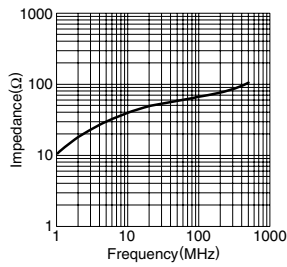
HF70BB6.4X10X3.2



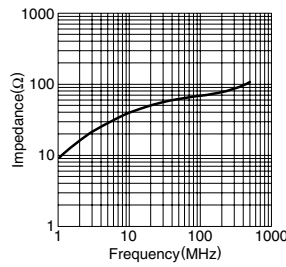
HF70BB9X5X4.5



HF70BB9X10X4.5



HF70BB9.5X10.4X4.9



• All specifications are subject to change without notice.