

EMI/EMC FILTER

RoHS

TB6-B SERIES



Features

- 3-Phase filters(Potted with epoxy resin)
- Good shield effect by using metal case
- Excellent filtering characteristics for both differential mode and common mode
- Safety: cCSAus, SEMKO+ENEC, KC, CE/

TB6-B***LASH only: cCSAus, SEMKO+ENEC, CE

Applications

- Battery, ESS equipments
- Electric vehicle charger
- Industrial equipment such as CNC machine, inverter, converter, telecommunication equipment, FA equipment, elevator, etc.

Specifications

| Model | Rated Voltage | Rated Current | Voltage Drop | Operating Temperature | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|-------------------|--------------|--|--------------------------|-------------------|---|-----|----|-----|----|-----|----|-----|----|-----|----|----|----|----|----|----|----|----|----|----|-----|---|
| TB6-B006NBDC | 254/440 (KC, SEMKO+ENEC, CE), 277/480 (cCSAus) (50/60Hz) | 6A | 1.0 V | <div>-25℃ ~ +100℃ Including temperature rise</div> <div>Derating Curve</div> <table><caption>Derating Curve Data</caption><tr><th>Ambient Temperature [°C]</th><th>Current Ratio [%]</th></tr><tr><td>0</td><td>100</td></tr><tr><td>10</td><td>100</td></tr><tr><td>20</td><td>100</td></tr><tr><td>30</td><td>100</td></tr><tr><td>40</td><td>100</td></tr><tr><td>50</td><td>95</td></tr><tr><td>60</td><td>85</td></tr><tr><td>70</td><td>75</td></tr><tr><td>80</td><td>60</td></tr><tr><td>90</td><td>40</td></tr><tr><td>100</td><td>0</td></tr></table> | Ambient Temperature [°C] | Current Ratio [%] | 0 | 100 | 10 | 100 | 20 | 100 | 30 | 100 | 40 | 100 | 50 | 95 | 60 | 85 | 70 | 75 | 80 | 60 | 90 | 40 | 100 | 0 |
| Ambient Temperature [°C] | | Current Ratio [%] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | | 95 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | | 85 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 70 | | 75 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 80 | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 90 | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B010NBDC | | 10A | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B016NBDC | 16A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B020NBDC | 20A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B030NBDC | 30A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B040As | 40A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B060LAs | 60A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B080LAs | 80A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B100LAs | 100A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B150LAs | 150A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B200LBs | 200A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B250LBs | 250A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B300LBs | 300A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB6-B400LBs | 400A | | | | | | | | | | | | | | | | | | | | | | | | | | | |

※ Many variations in X and Y capacitor value are available with approvals.

TB6-B*****s : Used for CNC Machines

TB6-B010~B030N(L)BDC : *Used for Servo Driver System

For the details, consult with local agent.

Note : Test Voltage: 3000VDC for 1 minute, line to ground

Insulation Resistance: 300MΩ minimum at 100VDC, line to ground

Weight: 1.3Kg for TB6-B006**/B010**/B016**/B020**/B030**

2.2Kg for TB6-B040A*

4.5Kg for TB6-B060LA*/B080LA*

4.3Kg for TB6-B100LA*

8.2/8.5Kg for TB6-B200LB*/B250LB*

12.2Kg for TB6-B400LB*

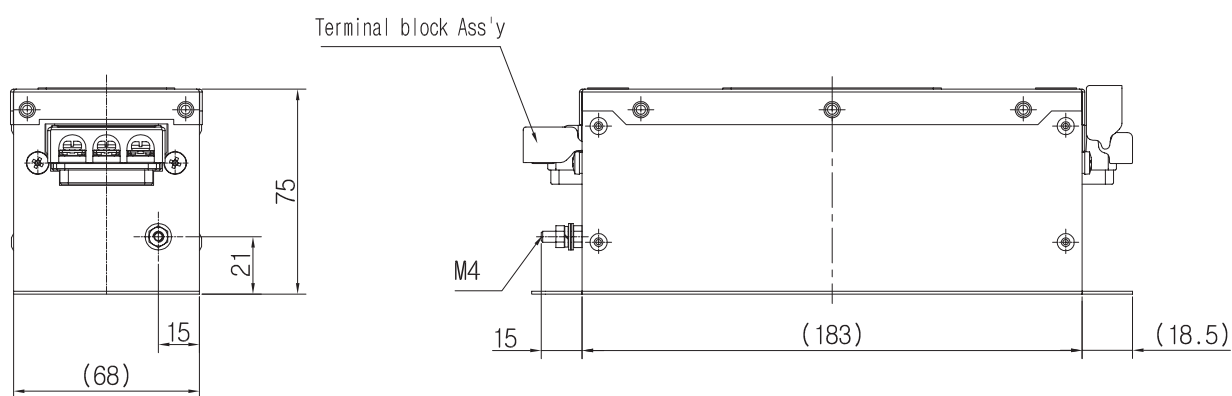
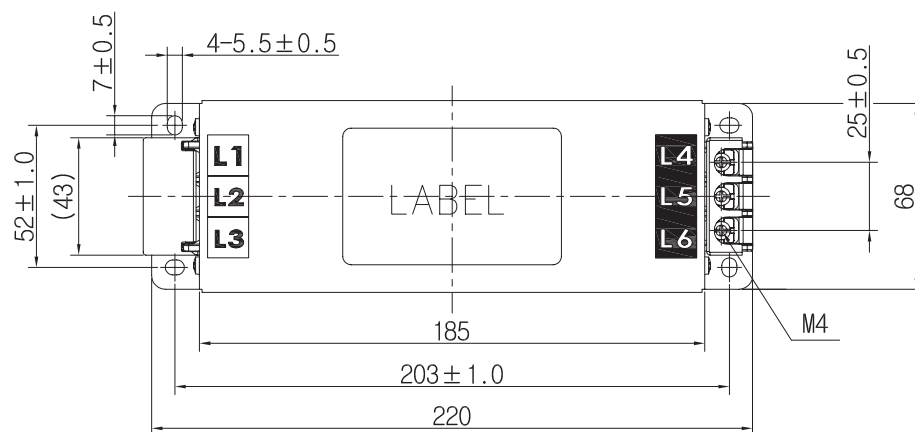
Model Number Construction

| TB6 | B | 060 | LA | S |
|--|----------------------------------|---|--|--|
| Series name : 3 Phase, 3Line Filter | Input/Output B:Terminal Block | Rated Current 060 = 60 A 080 = 80 A 100 = 100 A 150 = 150 A | Circuit Stage LA = 1 Stage (Permeability of Core : 7K) LB = 2 Stage (Permeability of Core : 7K) NB = 2 Stage Permeability of Core : 10K) | Suffix S= Standard 1= X-Capacitor 3.3uF, Y-Capacitor 10,000pF DC= X-Capacitor 2.2uF, Y-Capacitor 10,000pF |

Shapes and Dimensions

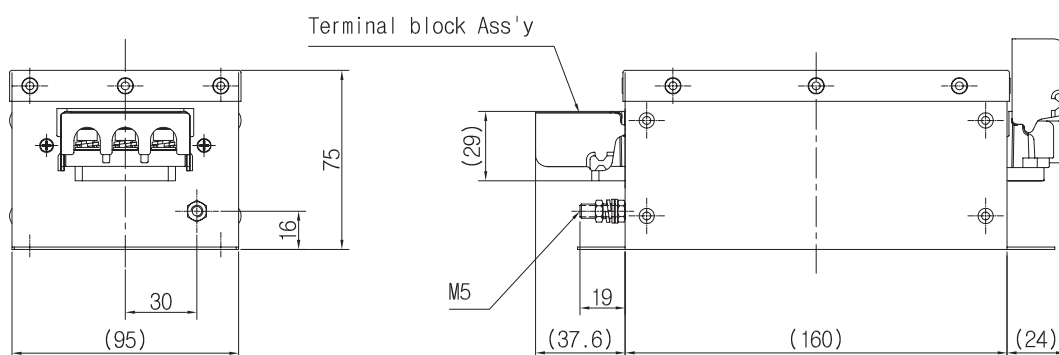
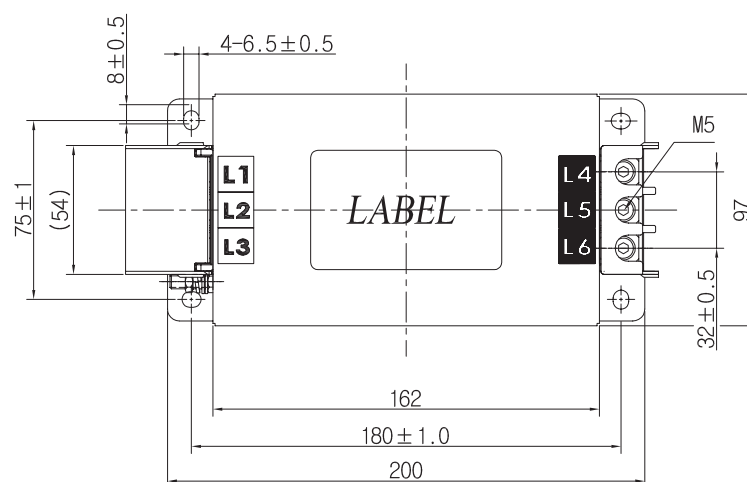
TB6-B006N(L)B**~TB6-B030NB**

- * Unit : mm
- * General tolerance : ± 3.0
- * Metal Case



TB6-B040LA*

- * Unit : mm
- * General tolerance : ± 3.0
- * Metal Case



TB6-B060LA* & TB6-B080LA*

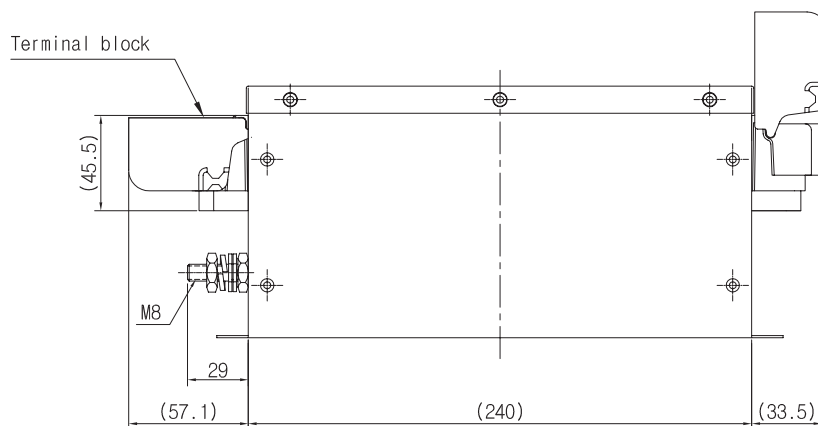
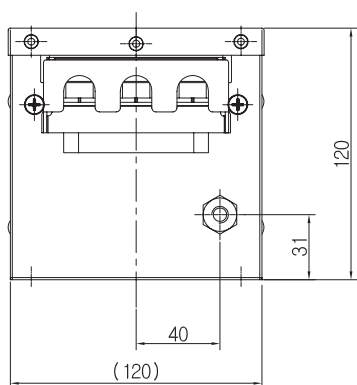
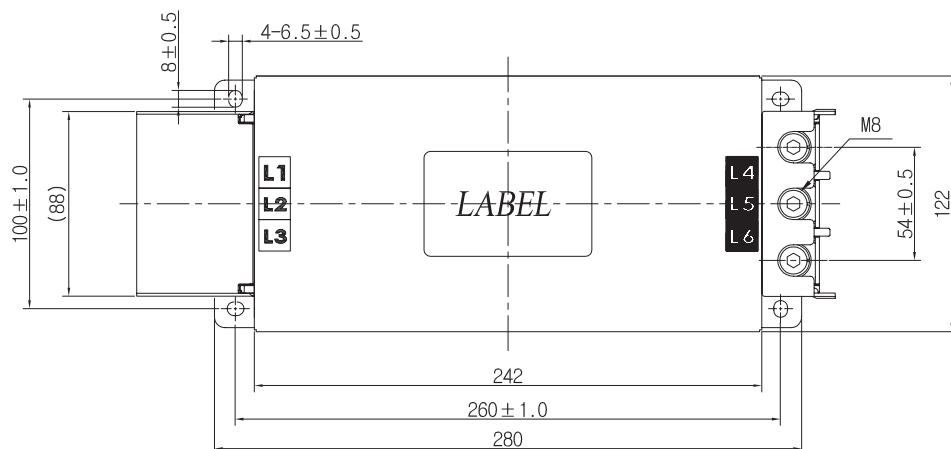
[illegible]

Technical drawing of the front view of a metal block. The drawing shows a rectangular block with a central vertical dashed line indicating symmetry. The overall width is 160, and the overall height is 45.5. The block has a base flange with a thickness of 29 and a central mounting hole with a diameter of M8. The distance from the left edge to the center of the M8 hole is 57.1. The distance from the right edge to the center of the M8 hole is 33.5. The block is labeled "Metal block" with a leader line pointing to the top surface.

Shapes and Dimensions

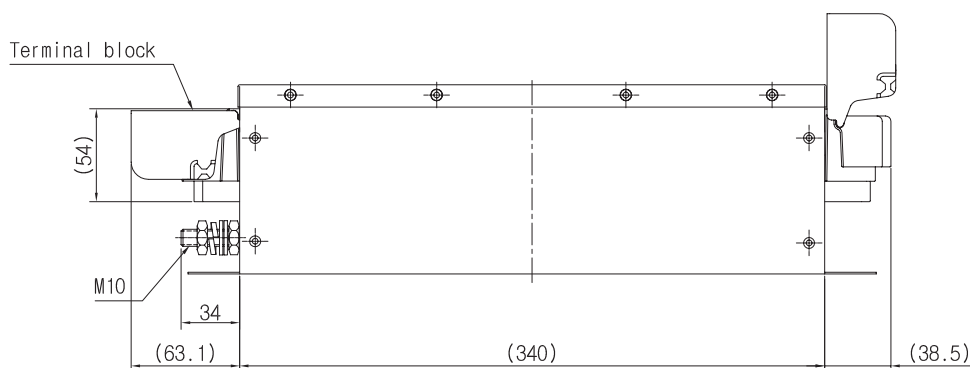
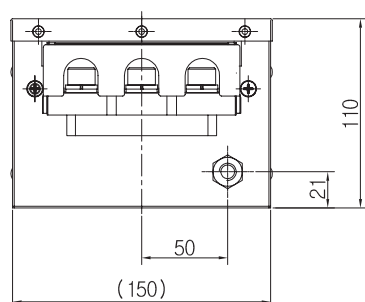
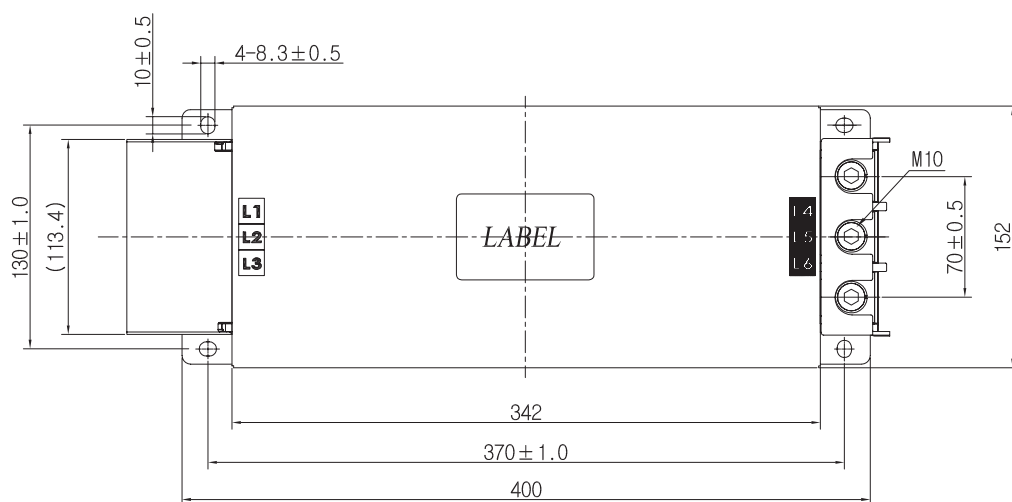
TB6-B150LA*

- * Unit : mm
- * General tolerance : ± 3.0
- * Metal Case



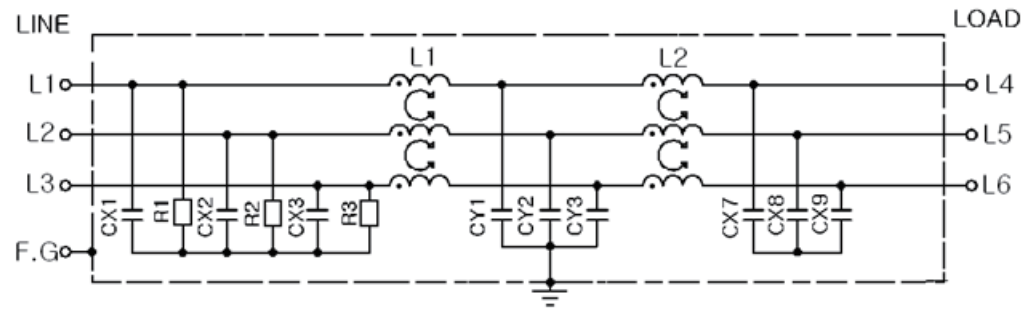
TB6-B200LB* & TB6-B250LB*

- * Unit : mm
- * General tolerance : ± 3.0
- * Metal Case

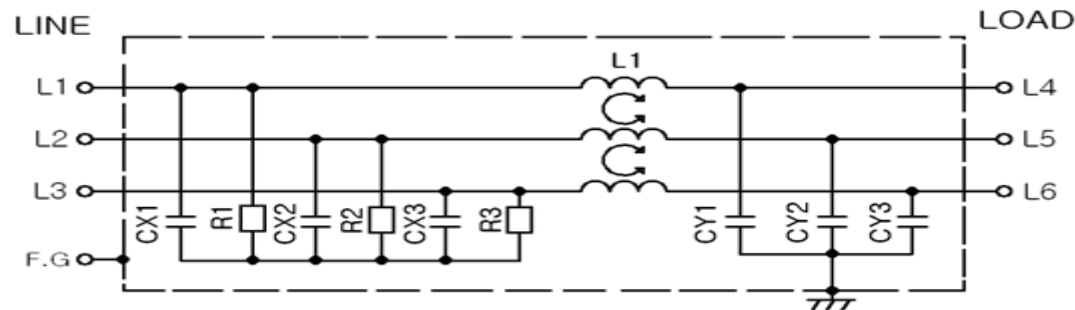


Circuit Diagram

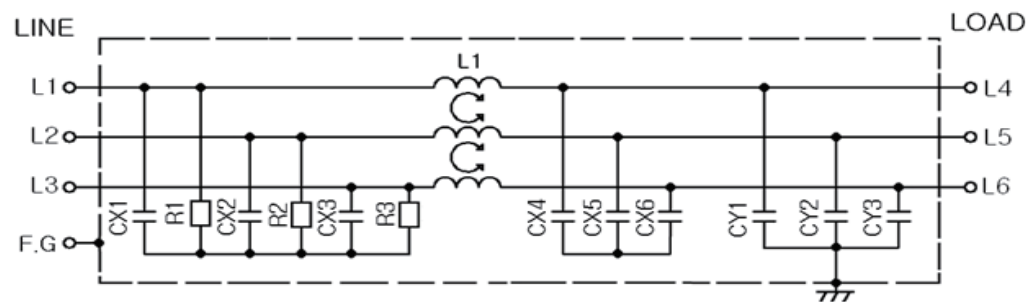
TB6-B006NBDC~TB6-B030NBDC



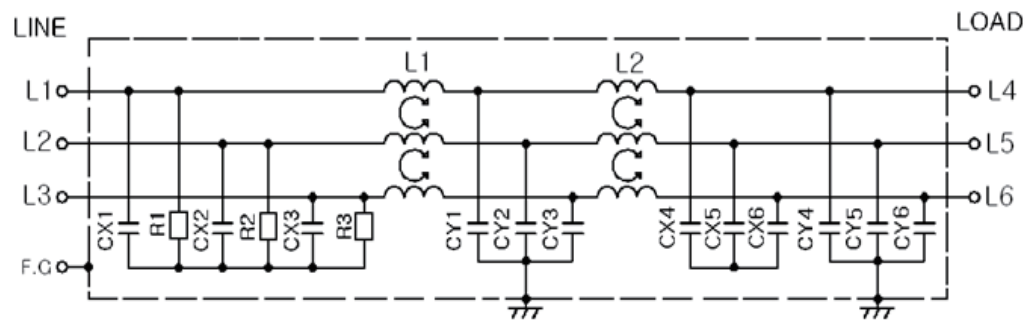
TB6-B040A*



TB6-B060LA** ~ TB6-B150LA**



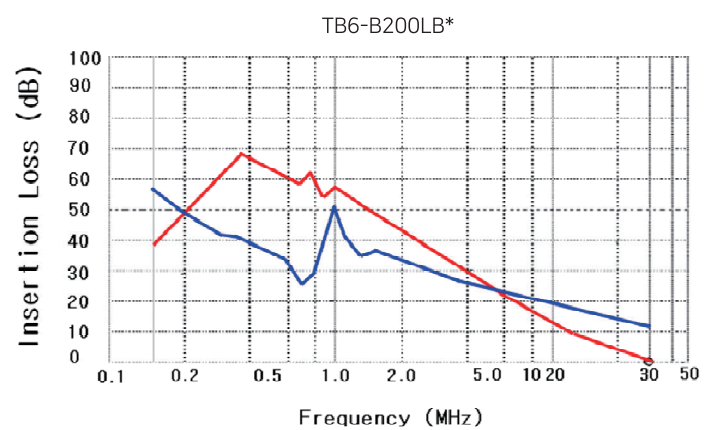
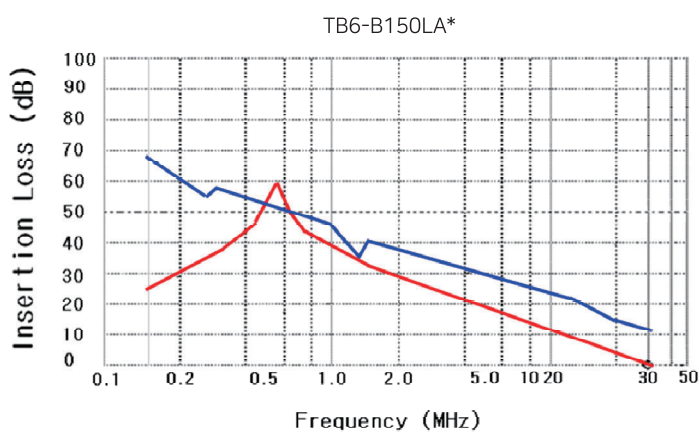
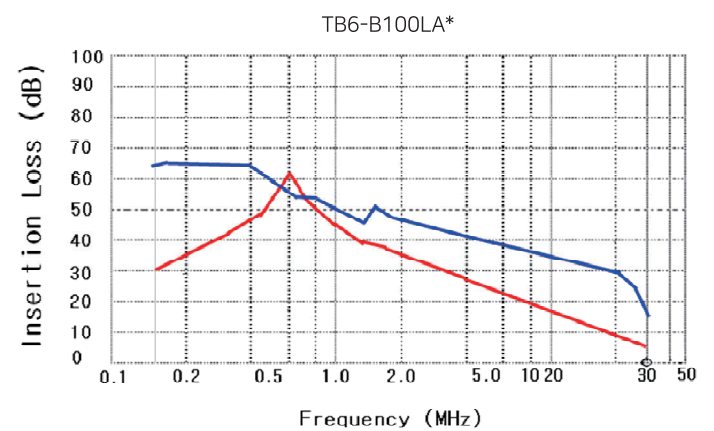
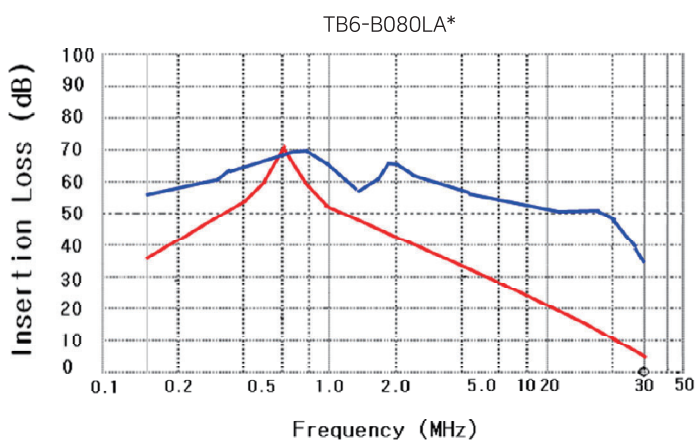
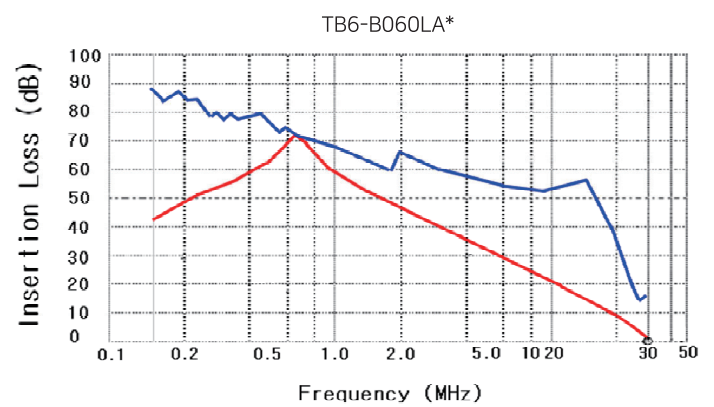
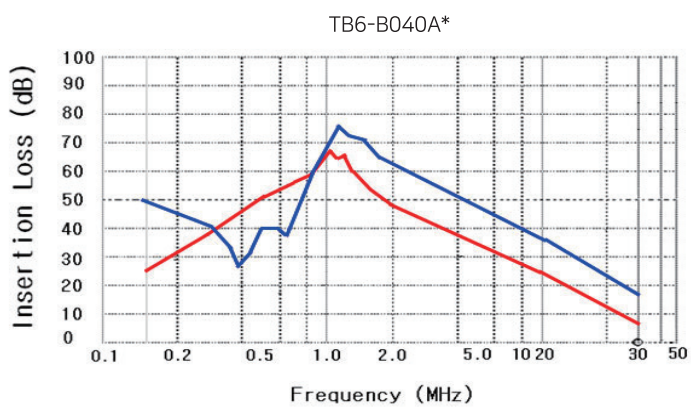
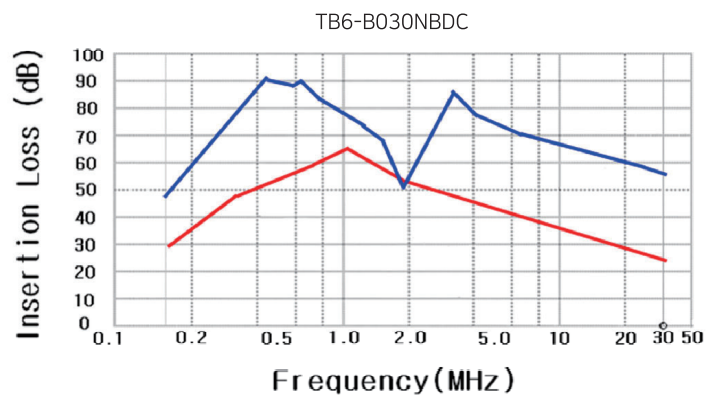
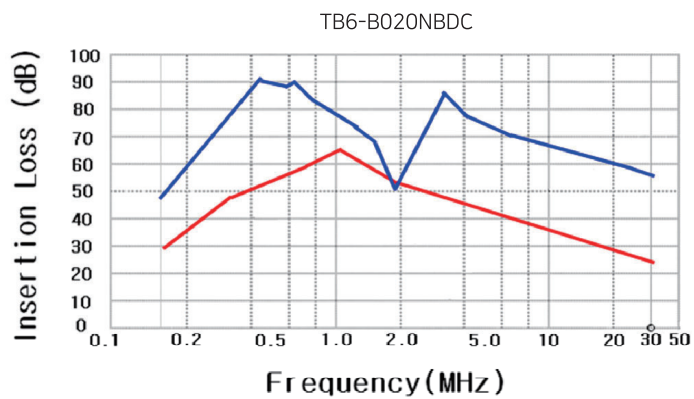
TB6-B200LB* ~ TB6-B400LB*



Attenuation Characteristics

Common mode (—)

Differential mode (—)



Attenuation Characteristics

Common mode ()

Differential mode ()

