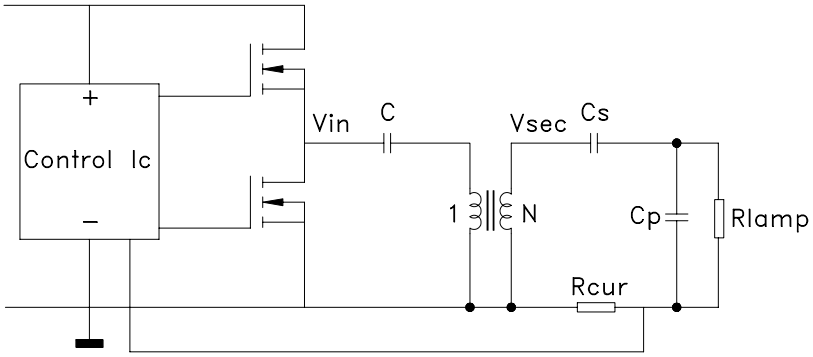
CCFL Driving Inverter Transformer

Schematic diagram of the backlight inverter



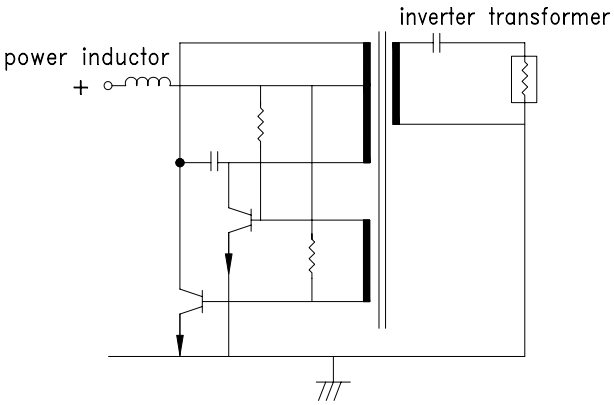
Applications

1. **LCD TV**
2. **LCD Monitor**
3. **Note book computer**
4. **PDA (Personal digital assistants)**
5. **Digital Camera**

Inverter transformer special place

1. **Small size**
2. **High output voltage**
3. **Suit for any royal circuit**
4. **Low EMI**
5. **Low power output**
6. **Resonant frequency can be controlled**

Roter Circuit



Product Type	Iutput Voltage (Vdc)	Output Open Voltage (Vrms) MAx	Freq. (kHz)	Power Consumption of CCFL (W) Max	Application	Page
CI8.5 Type	8-21	1600 Vrms	Max150kHZ	6.0	Notebook	3
CI25 Type	12	1400 Vrms	Max120kHZ	4.0	Notebook	4
CI29 Type	9-13	1600 Vrms	Max200kHZ	4.5	Notebook	5
UI8.3 TYPE	10	1500 Vrms	30-80kHZ	3.5	Notebook	6
UI9.8 Type	12	1700 Vrms	30-80kHZ	5	Notebook	7
UI11.7 SMD Type	12	1600 Vrms	30-80kHZ	6	Notebook	8
UI11.7 Dip Type	12	1600 Vrms	30-80kHZ	6	Notebook	9
UI15 Type	12	1400 Vrms	30-80kHZ	7	Notebook	10
EE19 Type	12	1400 Vrms	40-70kHZ	10	Monitor	11
EEL15 Type	12	1200 Vrms	30-80kHZ	10	Monitor	12
EEL19 Type	18	1500 Vrms	30-80kHZ	12	Monitor	13
EEL19 Type	12	1500 Vrms	30-80kHZ	12	Monitor	14
EEL19 Type	12	1800 Vrms	30-80kHZ	10	Monitor	15
EEL19 Type	12	2000 Vrms	30-80kHZ	12	Monitor	16
EEL19 Type	12	2000 Vrms	30-80kHZ	12	Monitor	17
EEL22 Type	12	2000 Vrms	30-80kHZ	15	Monitor	18
EEL25 Type	12	3000 Vrms	30-80kHZ	18	Monitor	19
EFD15 Type	12	1500 Vrms	30-80kHZ	7.5	Monitor	20
EFD16.5 SMD Type	12	1800 Vrms	30-80kHZ	8	TV	21
EFD 16.5 DipType	12	1800 Vrms	30-80kHZ	8	TV	22
EFD20 Dip Type	16	2000 Vrms	30-80kHZ	11	Monitor	23
EFD20 SMD Type	16	2000 Vrms	30-80kHZ	11	Monitor	24
EFD2124 Type	12	2100 Vrms	30-80kHZ	12	Monitor	25
EPC17 Type	16	1700 Vrms	30-80kHZ	8	Monitor	26
EPC19 DipType	15	1800 Vrms	30-80kHZ	11	Monitor	27
EPC19 SMD Type	15	1800 Vrms	30-80kHZ	11	Monitor	28
EPC19.6 Type	10	2000 Vrms	30-80kHZ	9	Monitor	29

CI 8.5 Type

Characteristic (reference)

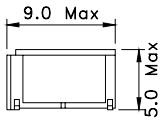
High Insulation Type

1. **Operational Frequency: MAX 150kHz**
2. **MAX: Open voltage: 1600Vrms**
3. **MAX: Lamp wattage 6.0(ω)**
4. **Efficiency: 85%**

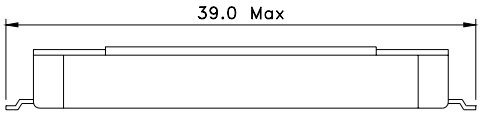
Appearance drawing of production



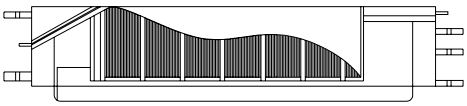
Mechanical Dimension: Unit: mm



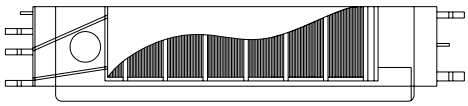
Front view



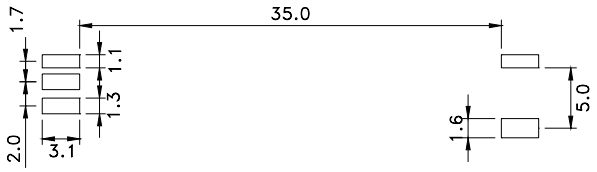
Flank view



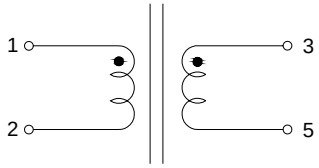
Bottom view



Top view



Schematic:



CI 25 Type

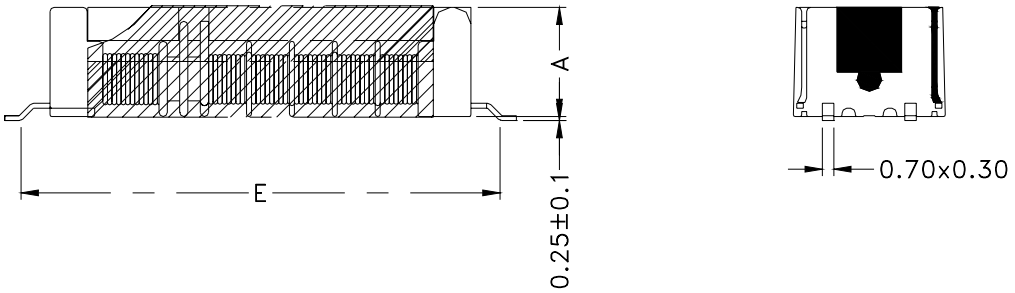
Appearance drawing of production

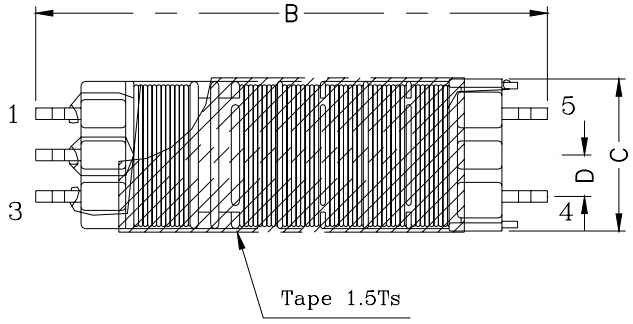
Characteristic (reference)

High Insulation Type

1. **Operational Frequency: MAX 120kHz**
2. **MAX: Open voltage: 1400Vrms**
3. **MAX: Lamp wattage 4.0(ω)**
4. **Efficiency: 80%**

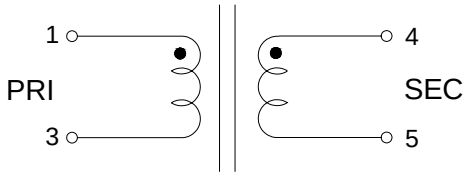
Mechanical Dimension: Unit: mm





UNIT: mm
A = 7.5 Max
B = 31.0±0.3
C = 10.0 MAX
D = 25.0±0.3
E = 29.0±0.3

Schematic:



CI 29 Type

Appearance drawing of production

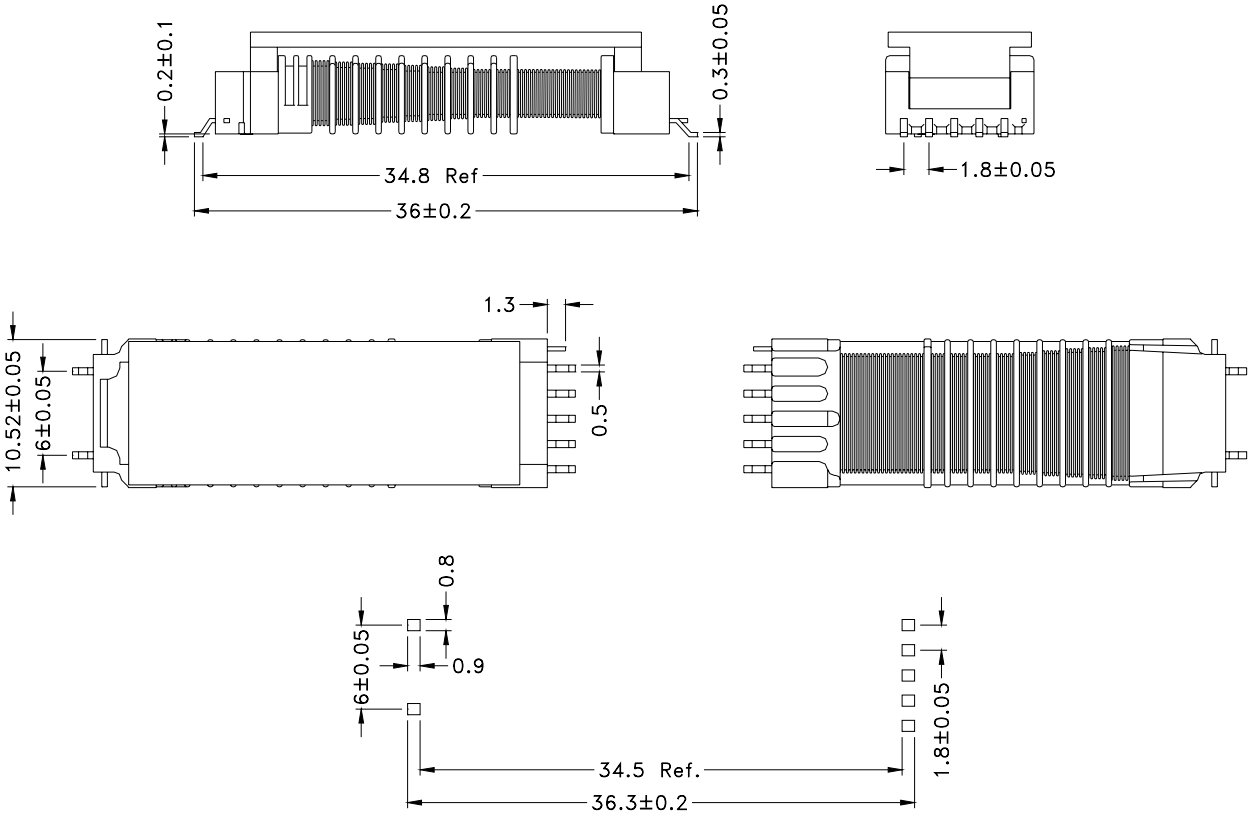


Characteristic (reference)

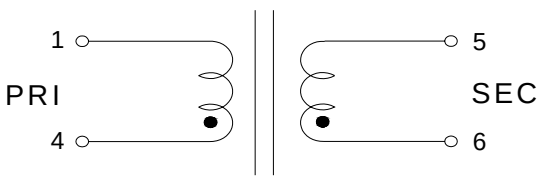
High Insulation Type

1. Operational Frequency: MAX 200kHz
2. MAX: Open voltage: 1600Vrms
3. MAX: Lamp wattage 4.5(ω)
4. Efficiency: 80%

Mechanical Dimension: Unit: mm



Schematic:



UI 8.3 Type

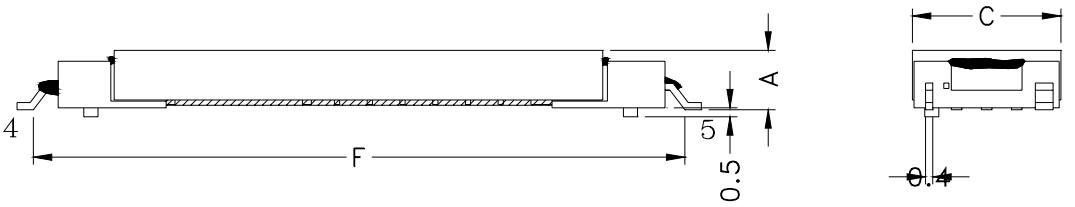
Appearance drawing of production

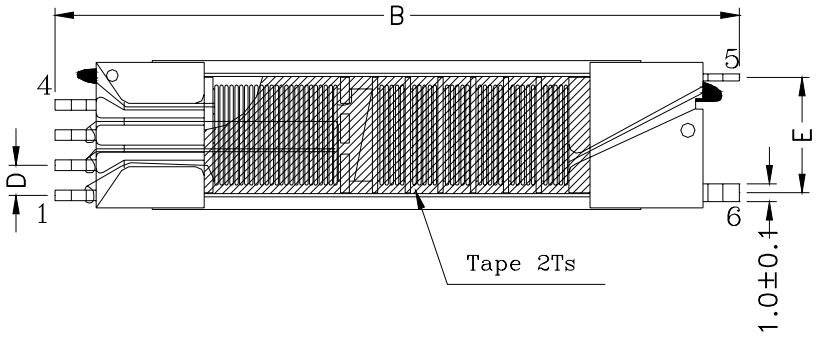
Characteristic (reference)

High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1500Vrms**
3. **MAX: Lamp wattage 3.5(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm

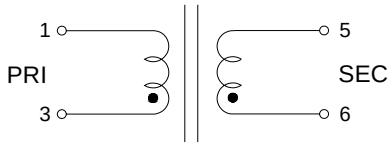




UNIT: mm

A = 4.4 Max
B = 38.8±0.5
C = 8.2±0.3
D = 1.7±0.2
E = 6.45±0.25
F = 36.6±0.5

Schematic:



UI 9.8 Type

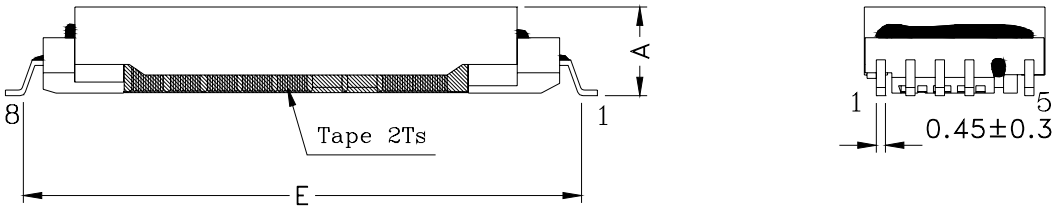
Appearance drawing of production

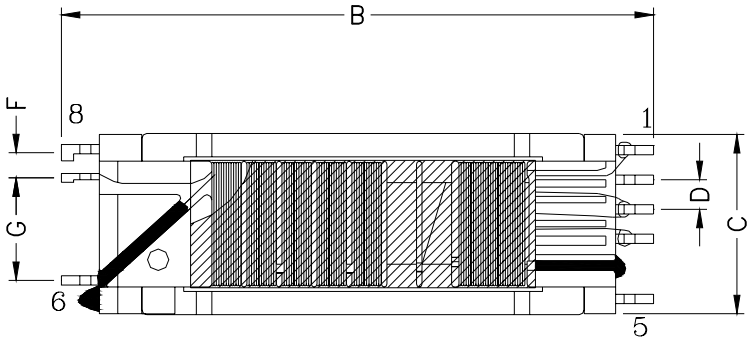
Characteristic (reference)

High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1700Vrms**
3. **MAX: Lamp wattage 5(ω)**
4. **Efficiency: 80%**

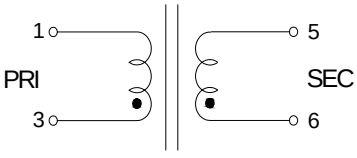
Mechanical Dimension: Unit: mm





UNIT: mm
A = 5.5 Max
B = 32.1±0.3
C = 10.8 Max
D = 1.6±0.1
E = 30.1±0.3
F = 1.45±0.3
G = 6.1±0.3

Schematic:



UI 11.7 Type(SMT Type)

Characteristic (reference)

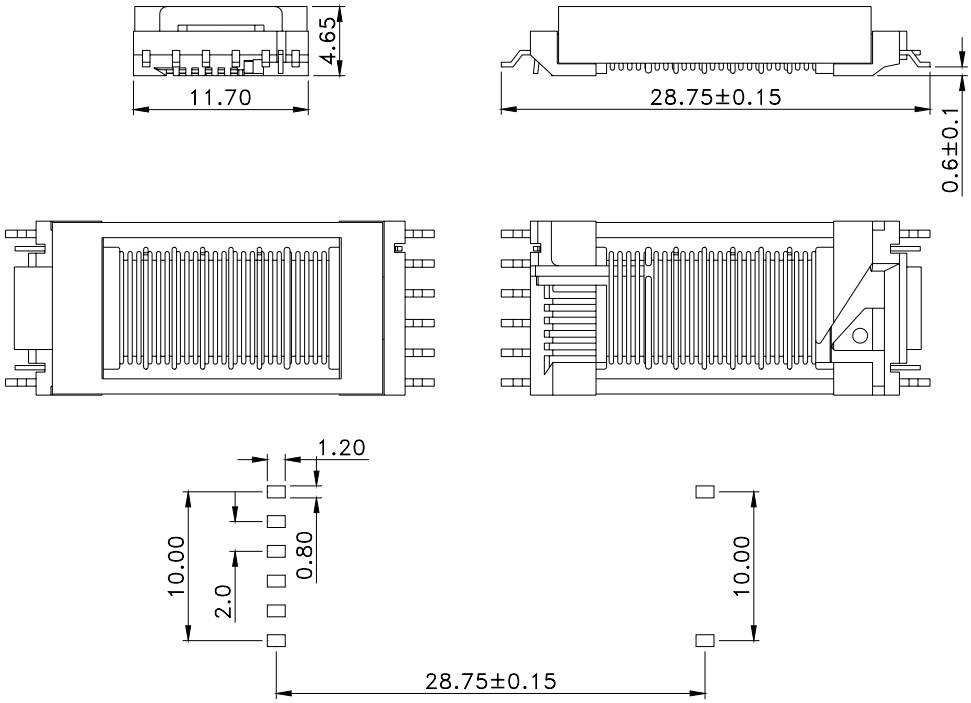
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1600Vrms**
3. **MAX: Lamp wattage 6(ω)**
4. **Efficiency: 80%**

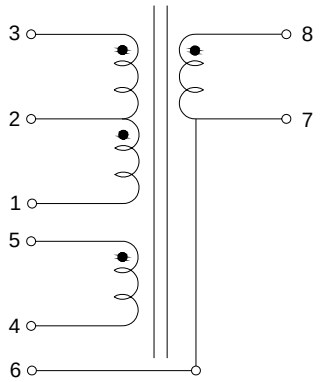
Appearance drawing of production



Mechanical Dimension: Unit: mm



Schematic:



UI 11.7 Type

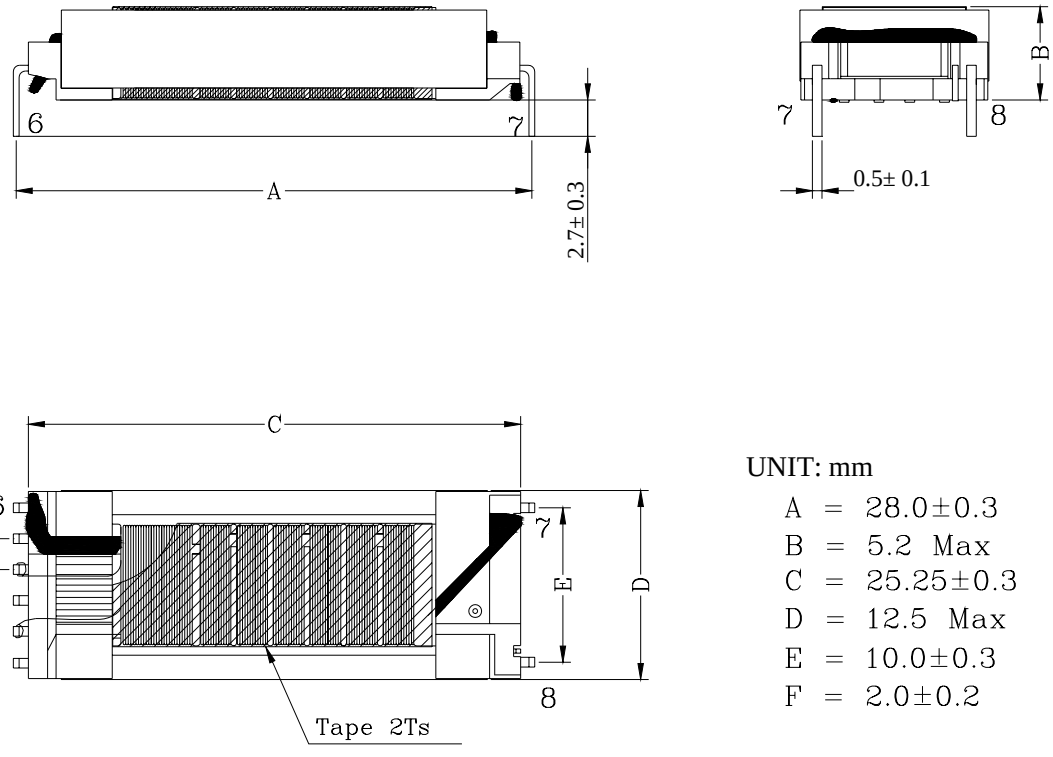
Appearance drawing of production

Characteristic (reference)

High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1600Vrms**
3. **MAX: Lamp wattage 6(ω)**
4. **Efficiency: 80%**

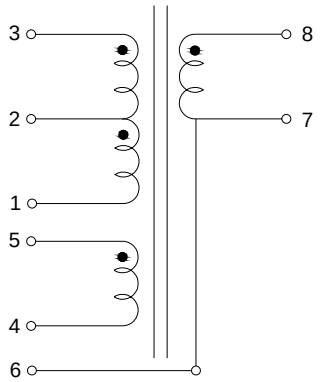
Mechanical Dimension: Unit: mm



UNIT: mm

A = 28.0±0.3
B = 5.2 Max
C = 25.25±0.3
D = 12.5 Max
E = 10.0±0.3
F = 2.0±0.2

Schematic:



UI 15 Type

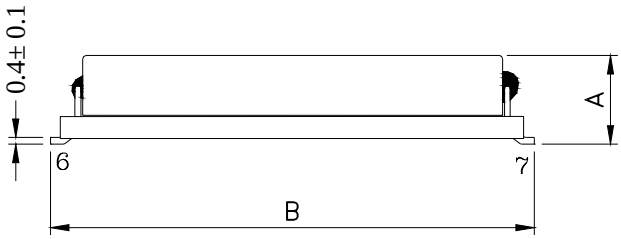
Appearance drawing of production

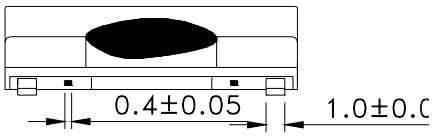
Characteristic (reference)

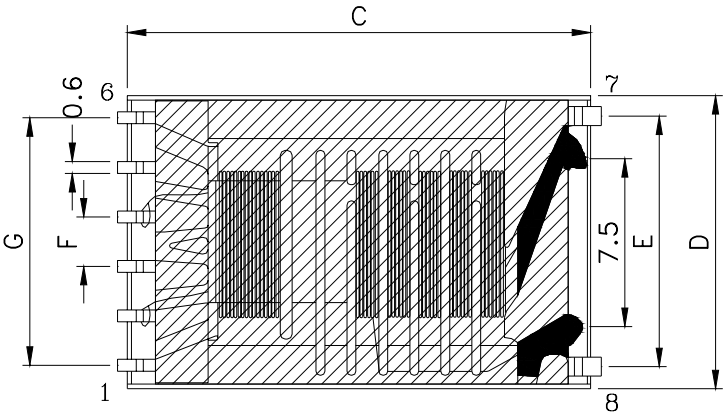
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1400Vrms**
3. **MAX: Lamp wattage 7(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm



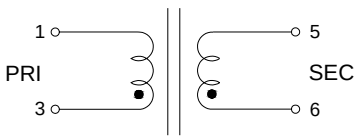




UNIT: mm

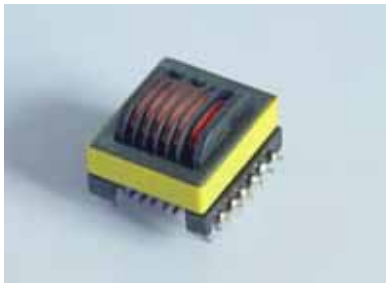
A = 8.2 Max
B = 25.0 Max
C = 23.5 Max
D = 16.0 Max
E = 12.5±0.3
F = 2.5±0.3
G = 12.5±0.3

Schematic:



EE19 Type

Appearance drawing of production

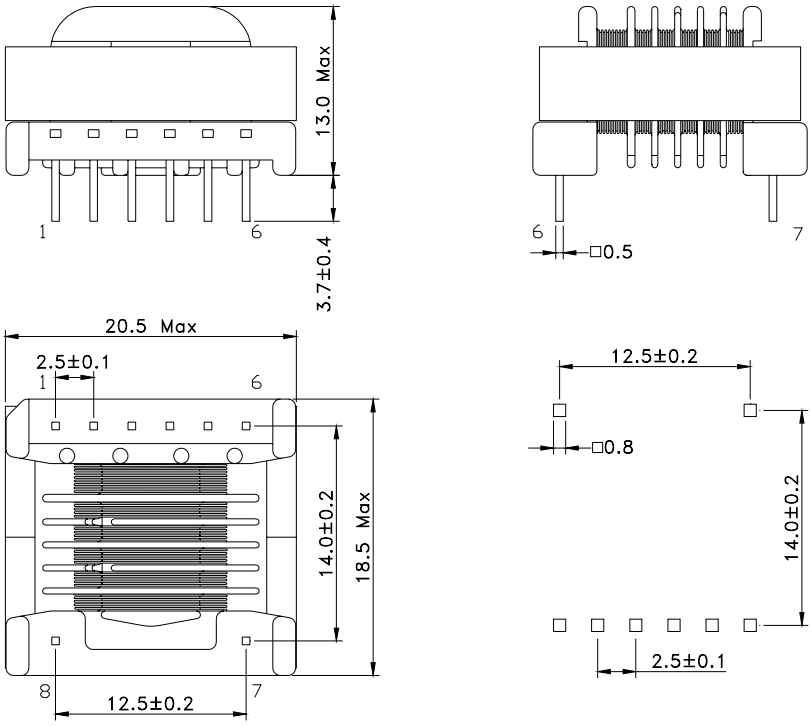


Characteristic (reference)

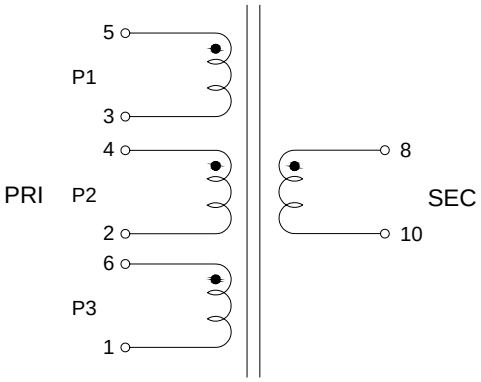
High Insulation Type

1. **Operational Frequency: 40~70kHz**
2. **MAX: Open voltage: 1400Vrms**
3. **MAX: Lamp wattage 10.0(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm



Schematic:



EEL15 Type (SMT Type)

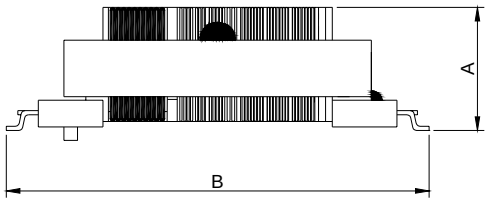
Appearance drawing of production

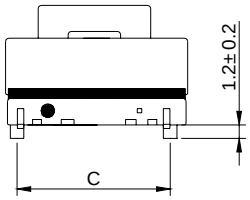
Characteristic (reference)

High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1200Vrms**
3. **MAX: Lamp wattage 10.0(ω)**
4. **Efficiency: 85%**

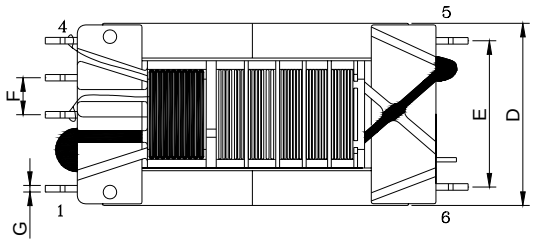
Mechanical Dimension: Unit: mm

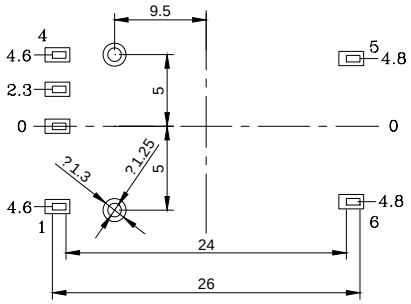




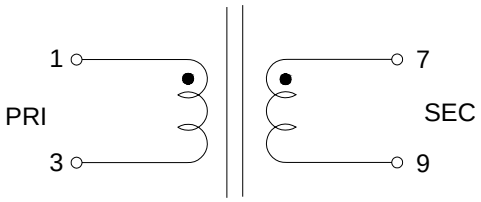
UNIT: mm

A = 11.0 MAX	D = 13.6 MAX
B = 26.6±0.6	E = 9.6±0.5
C = 10.0±0.4	F = 2.3±0.2
	G = 0.6±0.15





Schematic:



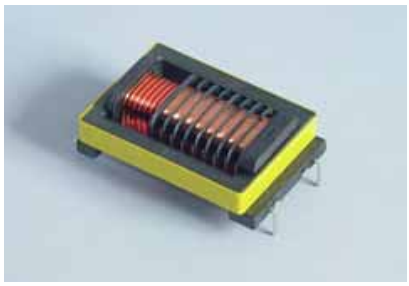
EEL19 Type

Characteristic (reference)

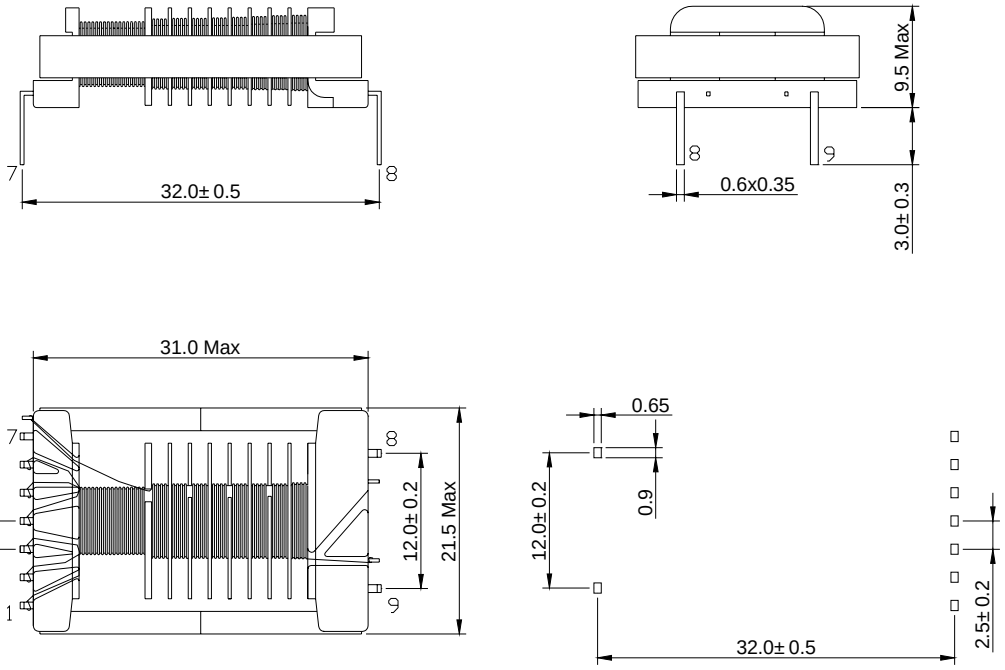
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1500Vrms**
3. **MAX: Lamp wattage 12.0(ω)**
4. **Efficiency: 85%**

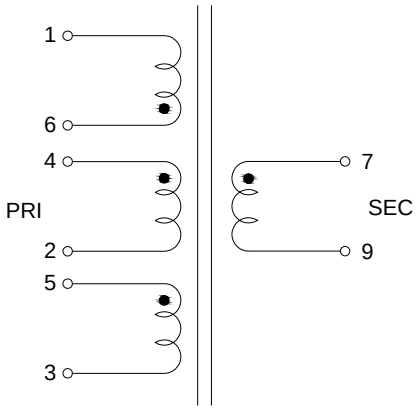
Appearance drawing of production



Mechanical Dimension: Unit: mm

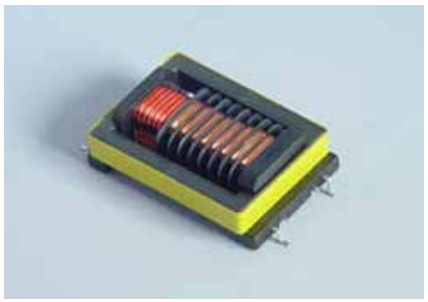


Schematic:



EEL19 Type (SMT Type)

Appearance drawing of production

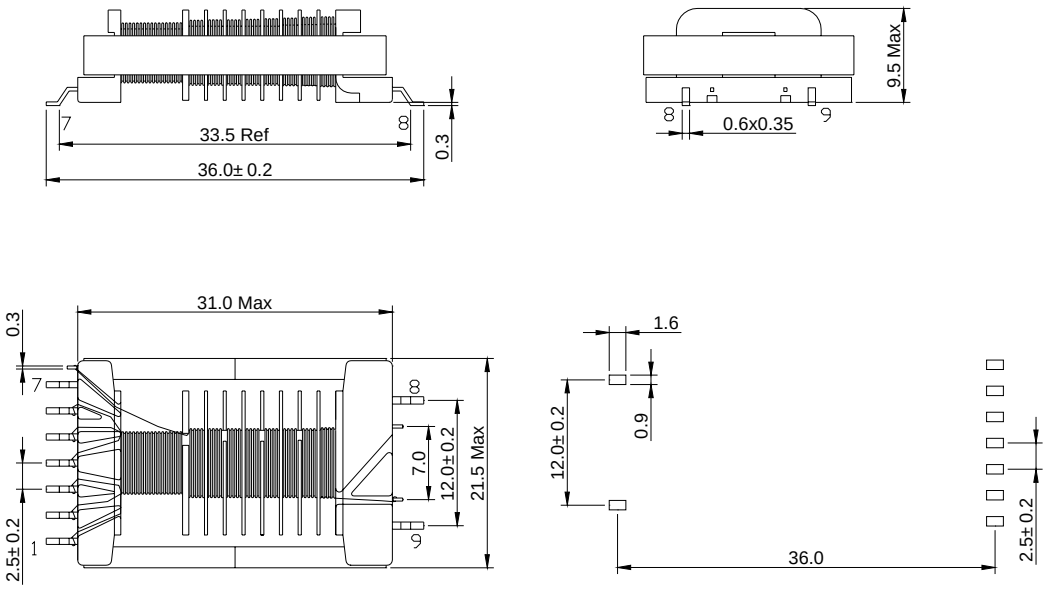


Characteristic (reference)

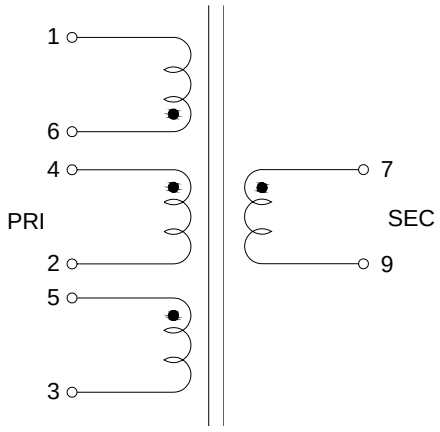
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1500Vrms**
3. **MAX: Lamp wattage 12.0(ω)**
4. **Efficiency: 85%**

Mechanical Dimension: Unit: mm



Schematic:



EEL19 Type (SMT Type)

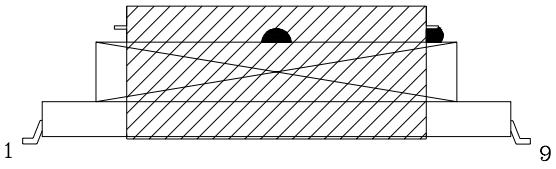
Appearance drawing of production

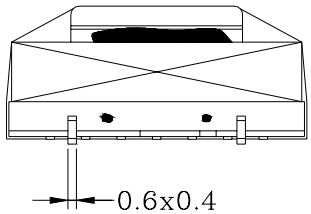
Characteristic (reference)

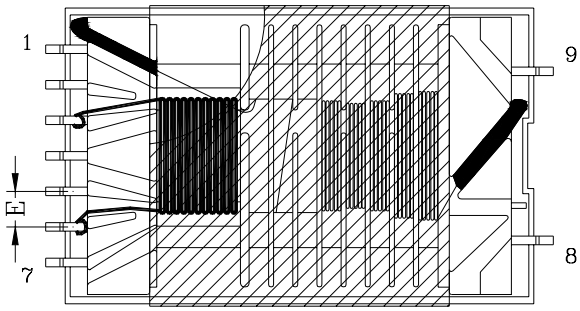
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1800Vrms**
3. **MAX: Lamp wattage 10.0(ω)**
4. **Efficiency: 85%**

Mechanical Dimension: Unit: mm

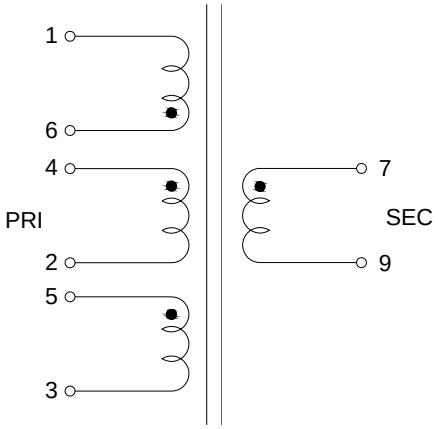






UNIT: mm
A = 10.3 Max
B = 20.8±0.5
C = 36.0±0.8
D = 32.0±0.5
E = 2.5±0.25

Schematic:



EEL19 Type (SMT Type)

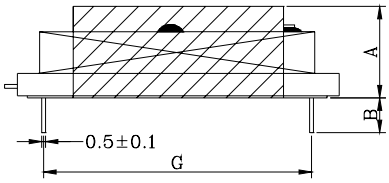
Appearance drawing of production

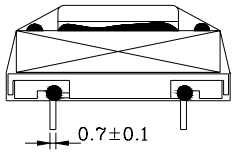
Characteristic (reference)

High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 2000Vrms**
3. **MAX: Lamp wattage 12.0(ω)**
4. **Efficiency: 85%**

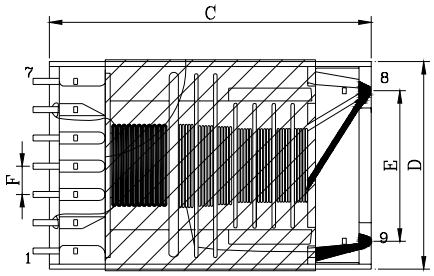
Mechanical Dimension: Unit: mm

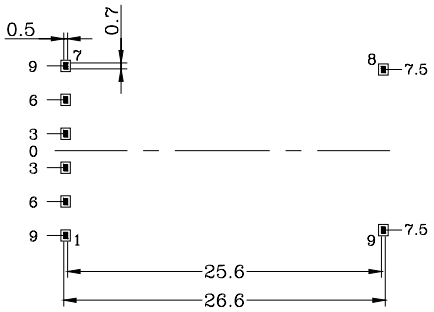




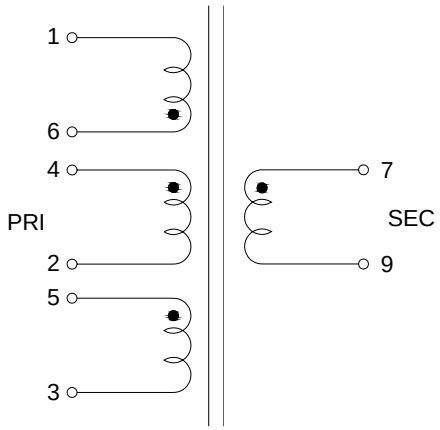
UNIT: mm

A = 14.0 MAX	D = 22.7 MAX
B = 3.5±0.4	E = 15.0±0.3
C = 31.8±0.3	F = 3.0±0.2
	G = 26.1±0.6





Schematic:



EEL19 Type (SMT Type)

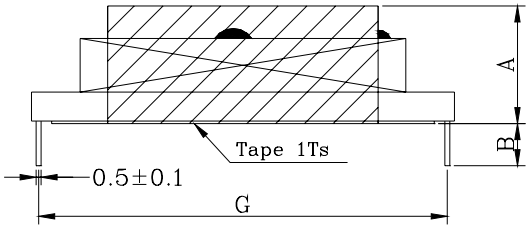
Appearance drawing of production

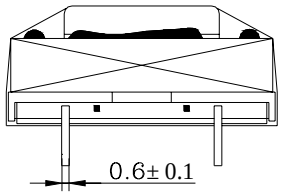
Characteristic (reference)

High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 2000Vrms**
3. **MAX: Lamp wattage 12.0(ω)**
4. **Efficiency: 85%**

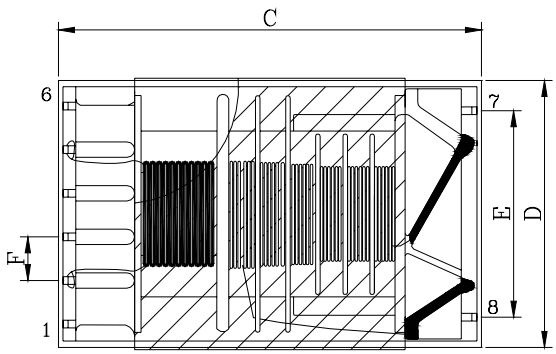
Mechanical Dimension: Unit: mm

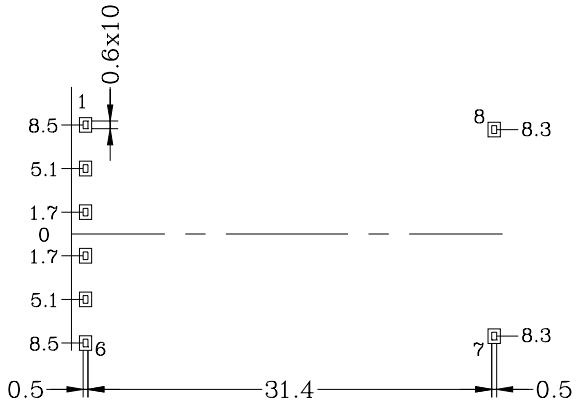




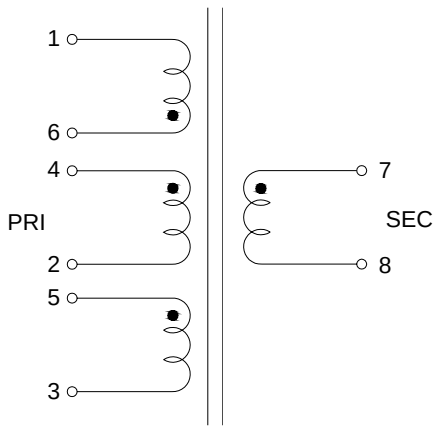
UNIT: mm

A = 14.0 MAX	D = 21.7 MAX
B = 3.5±0.4	E = 16.6±0.4
C = 33.5 MAX	F = 3.4±0.3
	G = 31.9±0.6





Schematic:



EEL22 Type

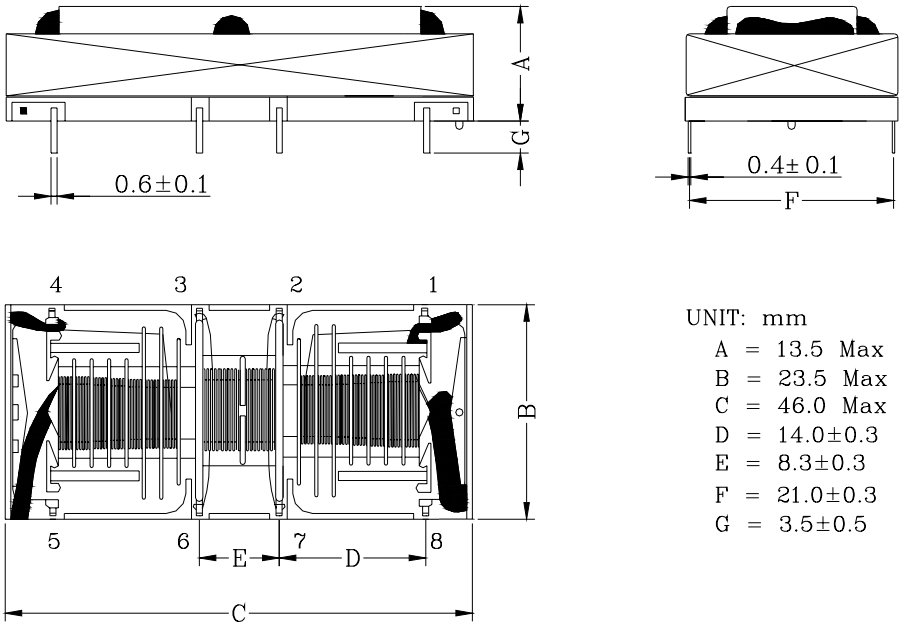
Appearance drawing of production

Characteristic (reference)

High Insulation Type

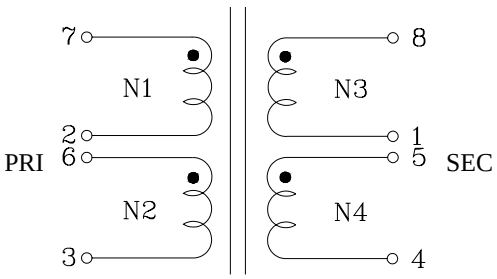
1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 2200Vrms**
3. **MAX: Lamp wattage 15(ω)**
4. **Efficiency: 85%**

Mechanical Dimension: Unit: mm



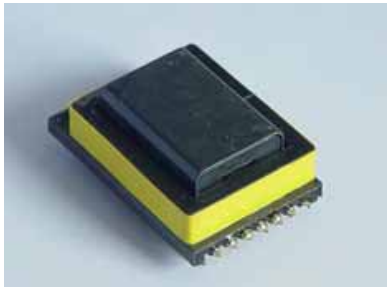
UNIT: mm
A = 13.5 Max
B = 23.5 Max
C = 46.0 Max
D = 14.0±0.3
E = 8.3±0.3
F = 21.0±0.3
G = 3.5±0.5

Schematic:



EEL25 Type

Appearance drawing of production

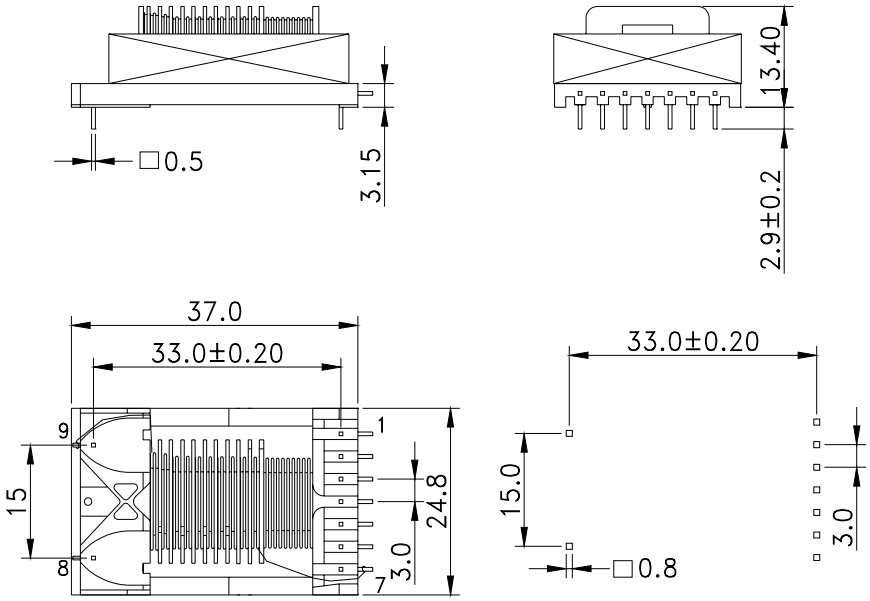


Characteristic (reference)

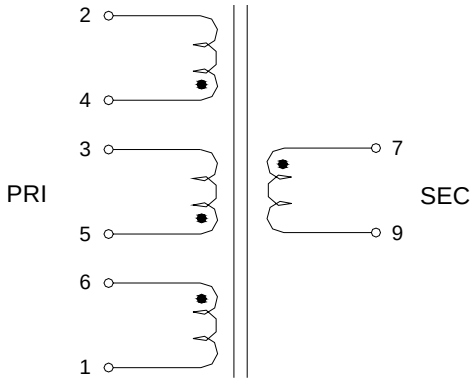
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 3000Vrms**
3. **MAX: Lamp wattage 18.0(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm

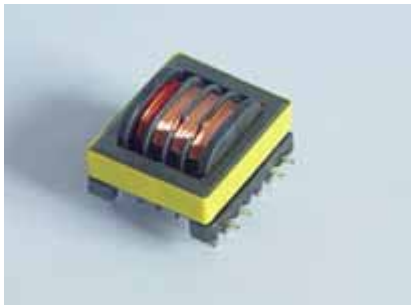


Schematic:



EFD15 Type (SMT Type)

Appearance drawing of production

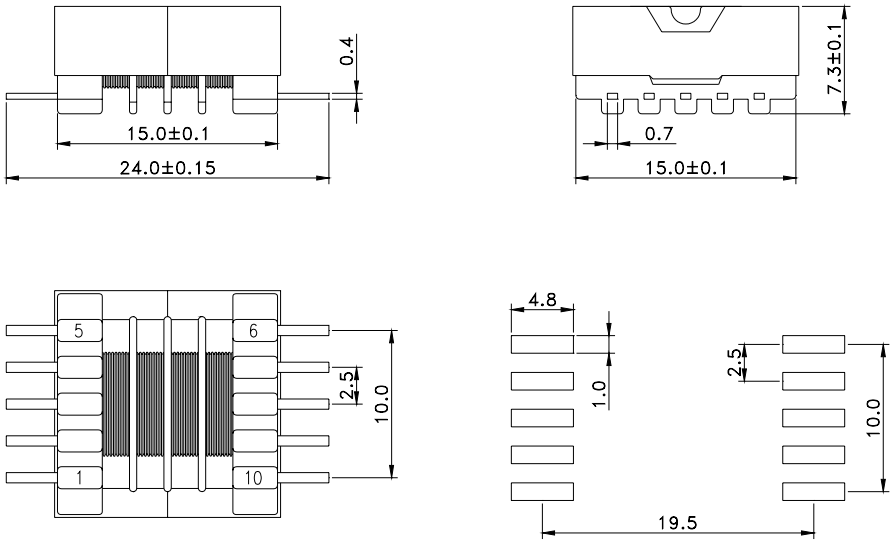


Characteristic (reference)

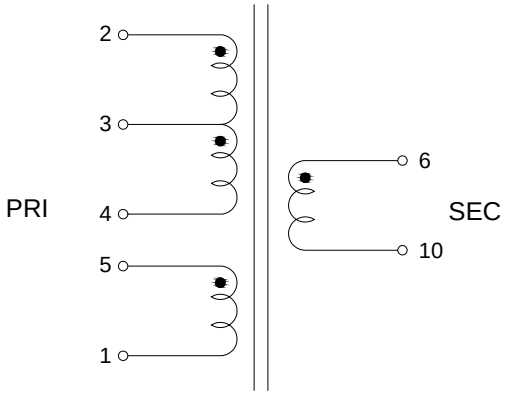
High Insulation Type

1. **Operational Frequency: 30~80kHZ**
2. **MAX: Open voltage: 1500Vrms**
3. **MAX: Lamp wattage 7.5(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm

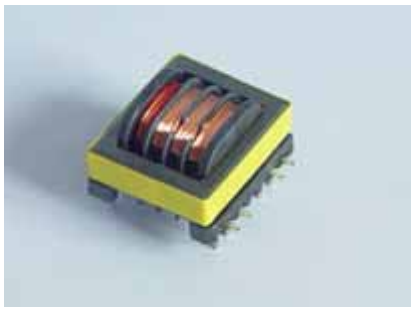


Schematic:



EFD16.5 Type (SMT Type)

Appearance drawing of production

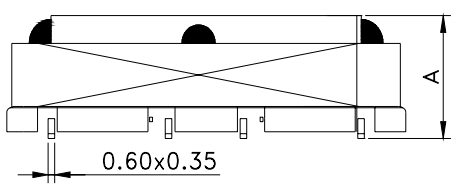


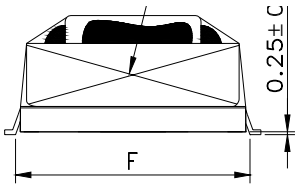
Characteristic (reference)

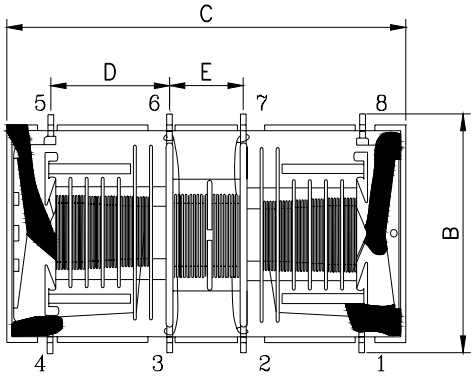
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1800Vrms**
3. **MAX: Lamp wattage 8(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm

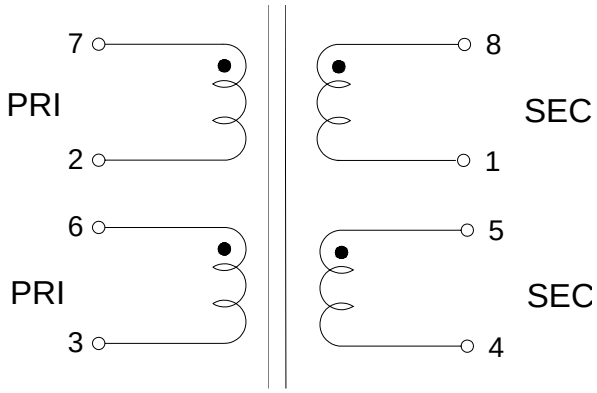






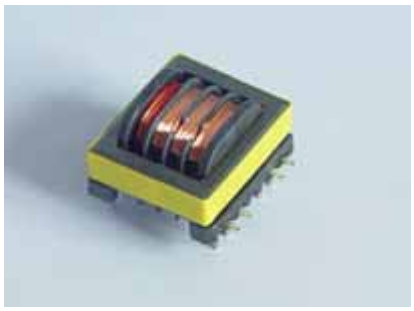
UNIT: mm
A = 10.0 Max
B = 22.0±0.5
C = 41.0 Max
D = 12.15±0.3
E = 8.25±0.3
F = 20.4±0.3

Schematic:



EFD16.5 Type

Appearance drawing of production

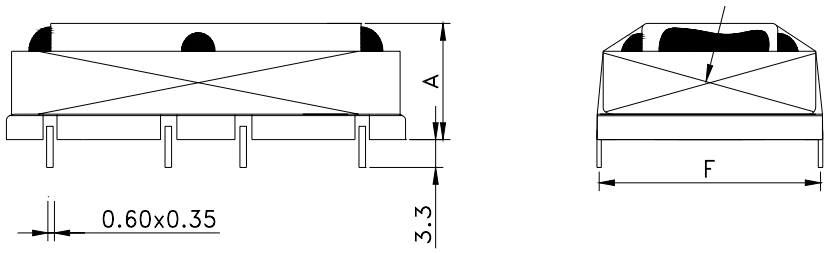


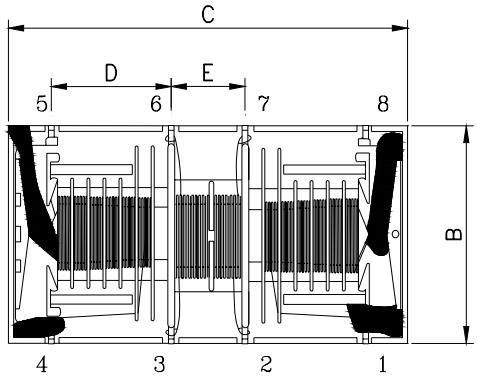
Characteristic (reference)

High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1800Vrms**
3. **MAX: Lamp wattage 8(ω)**
4. **Efficiency: 80%**

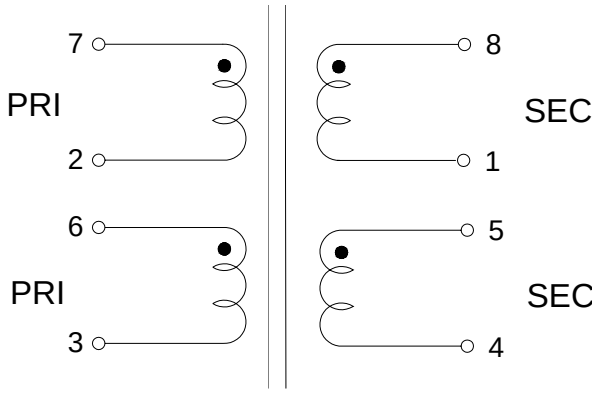
Mechanical Dimension: Unit: mm





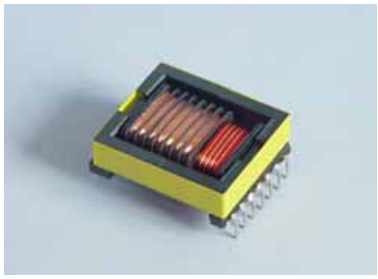
UNIT: mm
A = 10.0 Max
B = 22.0±0.5
C = 41.0 Max
D = 12.15±0.3
E = 8.25±0.3
F = 20.4±0.3

Schematic:



EFD20 Type

Appearance drawing of production

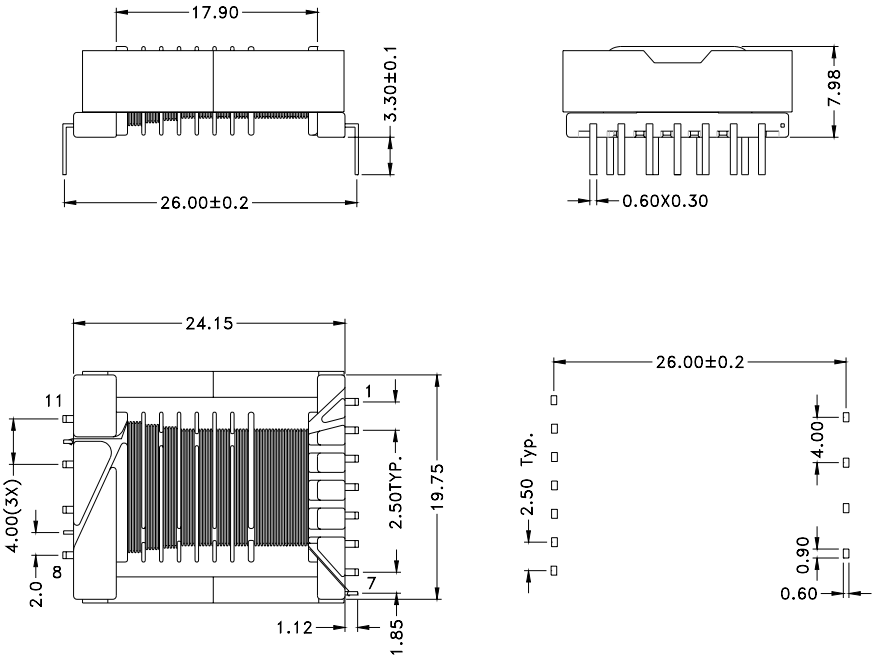


Characteristic (reference)

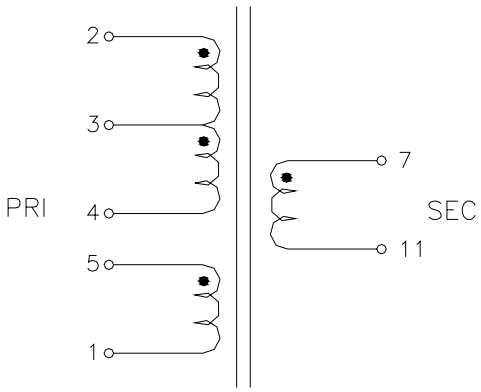
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 2000Vrms**
3. **MAX: Lamp wattage 11.0(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm



Schematic:



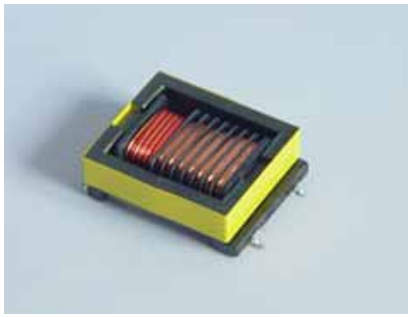
EFD20 Type (SMT Type)

Characteristic (reference)

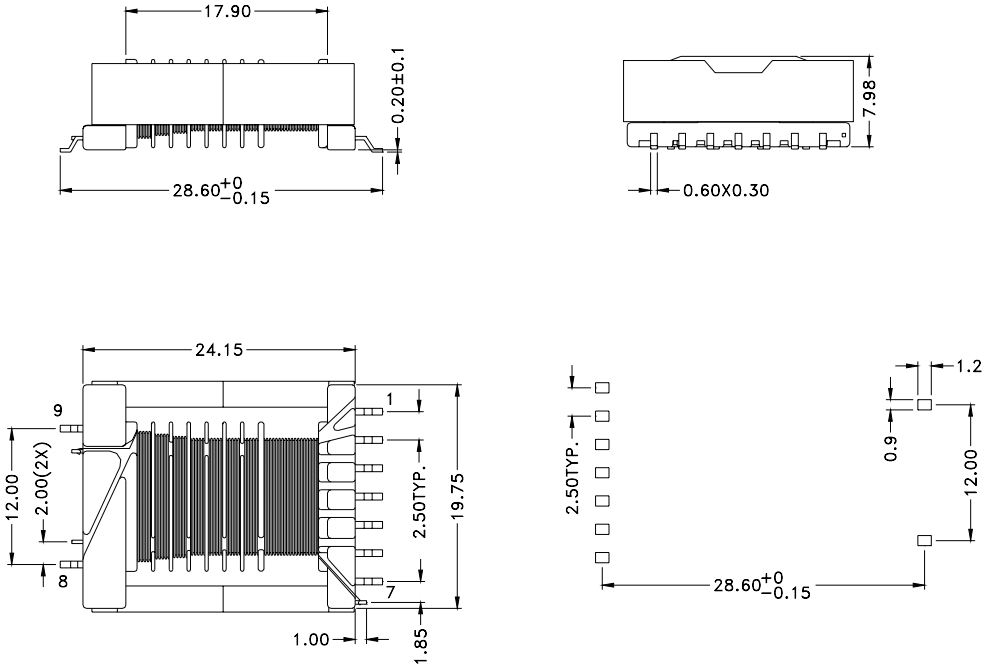
High Insulation Type

1. **Operational Frequency: MAX 80kHz**
2. **MAX: Open voltage: 2000Vrms**
3. **MAX: Lamp wattage 11.0(ω)**
4. **Efficiency: 80%**

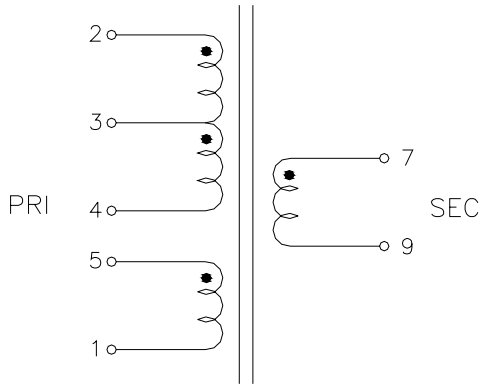
Appearance drawing of production



Mechanical Dimension: Unit: mm



Schematic:



EFD2124 Type

Characteristic (reference)

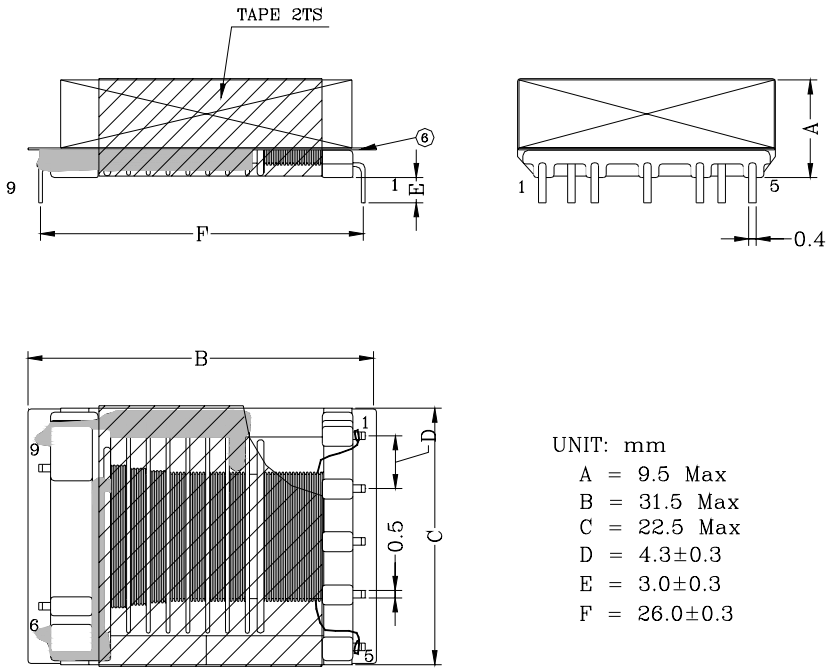
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 2100Vrms**
3. **MAX: Lamp wattage 12.0(ω)**
4. **Efficiency: 80%**

Appearance drawing of production

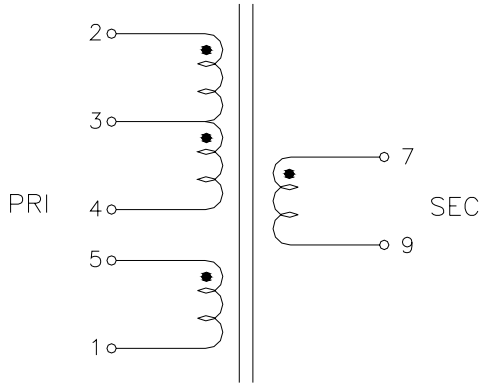


Mechanical Dimension: Unit: mm



UNIT: mm
A = 9.5 Max
B = 31.5 Max
C = 22.5 Max
D = 4.3±0.3
E = 3.0±0.3
F = 26.0±0.3

Schematic:



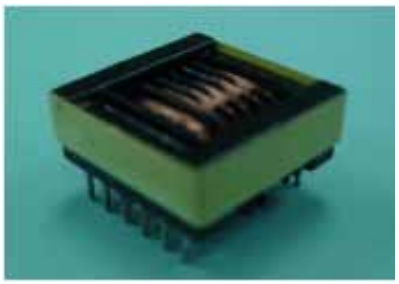
EPC17 Type

Characteristic (reference)

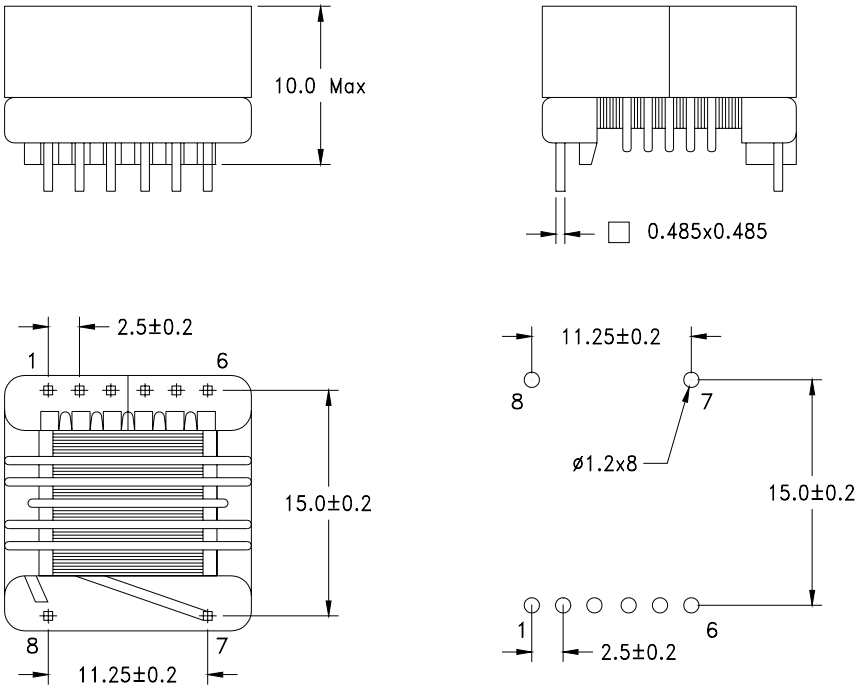
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1700Vrms**
3. **MAX: Lamp wattage 8.0(ω)**
4. **Efficiency: 80%**

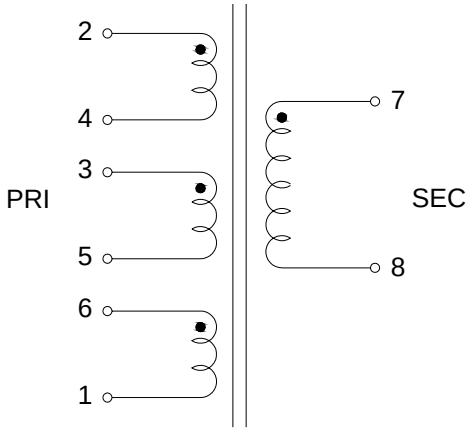
Appearance drawing of production



Mechanical Dimension: Unit: mm



Schematic:



EPC19 Type

Appearance drawing of production

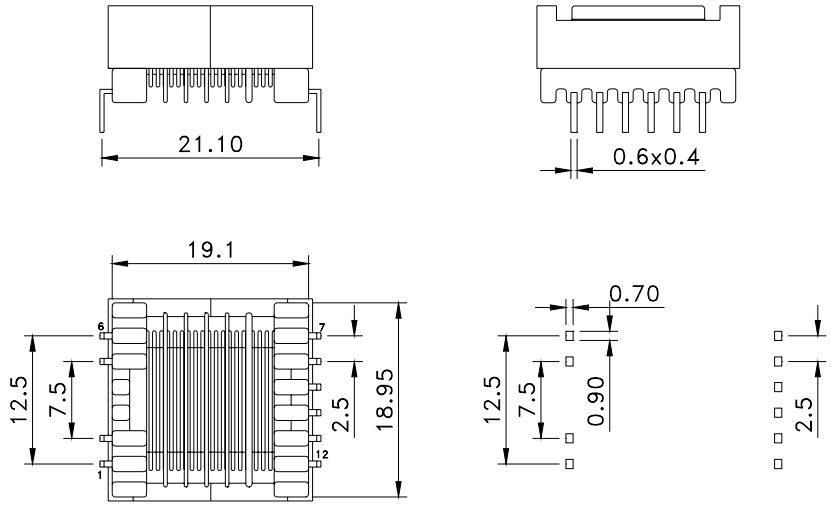


Characteristic (reference)

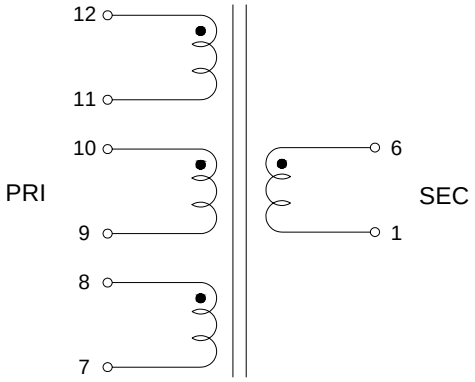
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1800Vrms**
3. **MAX: Lamp wattage 11(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm



Schematic:



EPC19 Type(SMT Type)

Characteristic (reference)

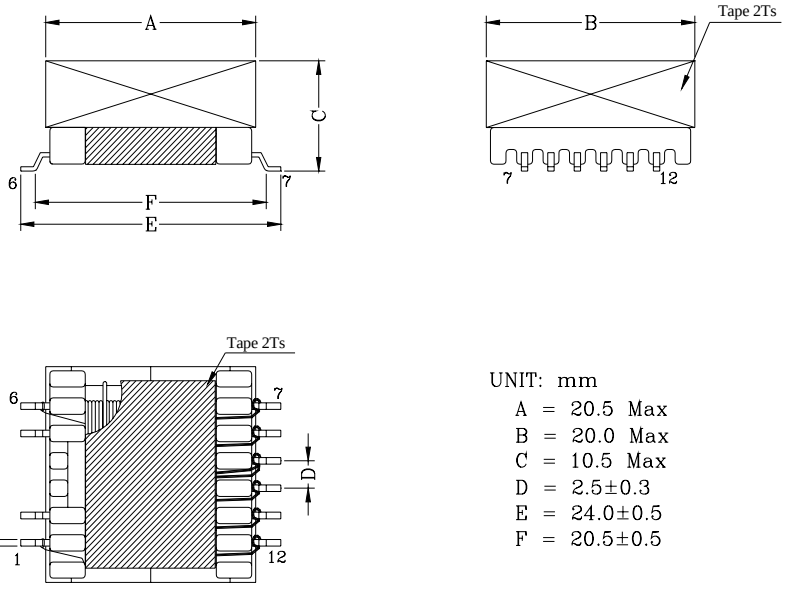
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 1800Vrms**
3. **MAX: Lamp wattage 11(ω)**
4. **Efficiency: 80%**

Appearance drawing of production

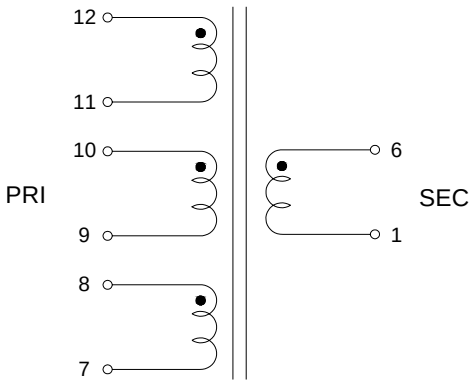


Mechanical Dimension: Unit: mm



UNIT: mm
A = 20.5 Max
B = 20.0 Max
C = 10.5 Max
D = 2.5±0.3
E = 24.0±0.5
F = 20.5±0.5

Schematic:



EPC19.6 Type(SMT Type)

Appearance drawing of production

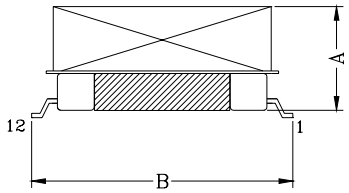


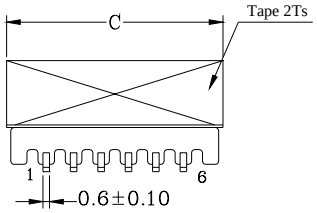
Characteristic (reference)

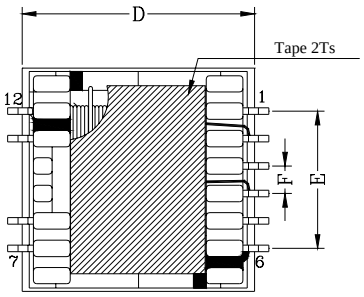
High Insulation Type

1. **Operational Frequency: 30~80kHz**
2. **MAX: Open voltage: 2000Vrms**
3. **MAX: Lamp wattage 9.0(ω)**
4. **Efficiency: 80%**

Mechanical Dimension: Unit: mm







UNIT: mm
A = 11.5 Max
B = 24.5±0.5
C = 22.0 Max
D = 23.0 Max
E = 12.5±0.3
F = 2.5±0.3

Pin9, 10 no terminal

Schematic:

