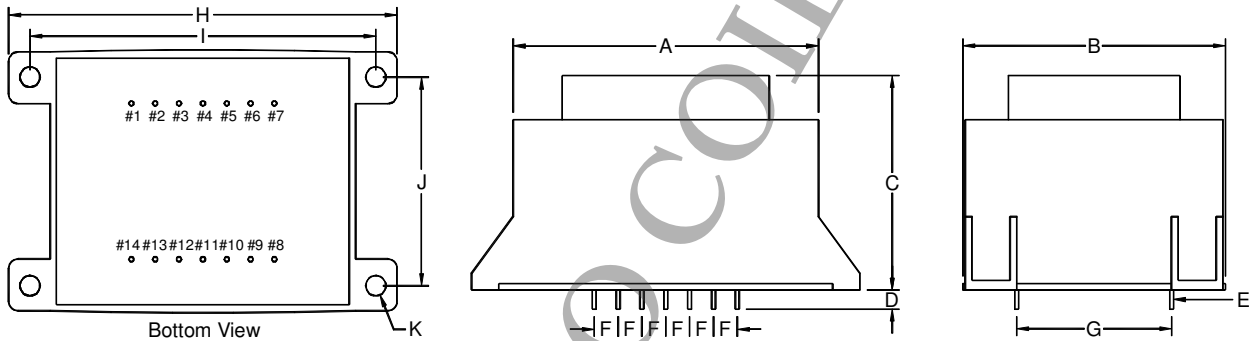




### Type EI60 / 21

- Power – 20/22/25VA
- Frequency – 50/60 Hz
- Temperature class – Class B (130°C)
- Ambient temperature (ta) – 40°C
- Dielectric strength – 4000Vrms
- Potted under vacuum
- Agency approvals
  - TUV / CE: EN61558 / EN60950
  - UL: UL506; UL5085-1 / -2
  - C-UL: CSA C22.2 #66 / #66.1 / #66.2

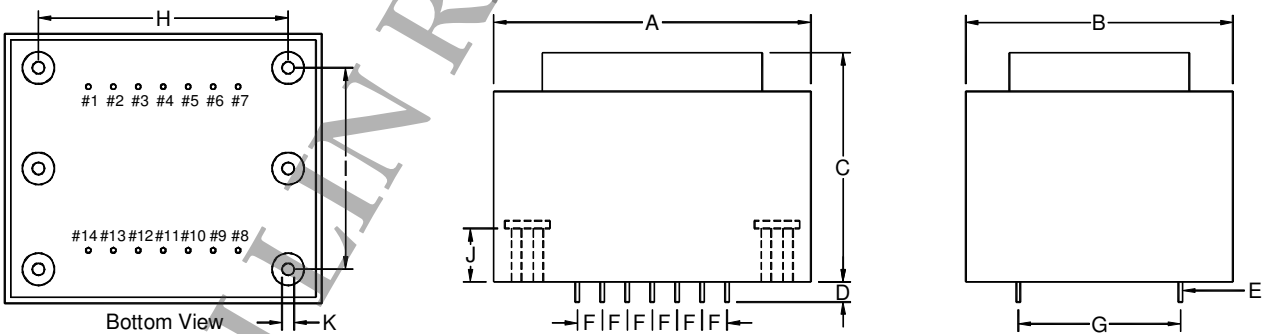
### Potting Shell – Type A



	A	B	C	D	E	F	G	H	I	J	K	Weight (g)
Dimension (mm)	63.5	54.5	45.5	4.0	φ0.8	5.0	32.5	82.5	72.5	43.5	φ4.2	600
Tolerance (mm)	±1.0	±1.0	±1.0	±1.0	±0.1	±0.2	±0.5	max.	±0.5	±0.5	±0.2	approx.

Note: Unused pins are omitted for standard parts. Unused pins can be provided upon request.

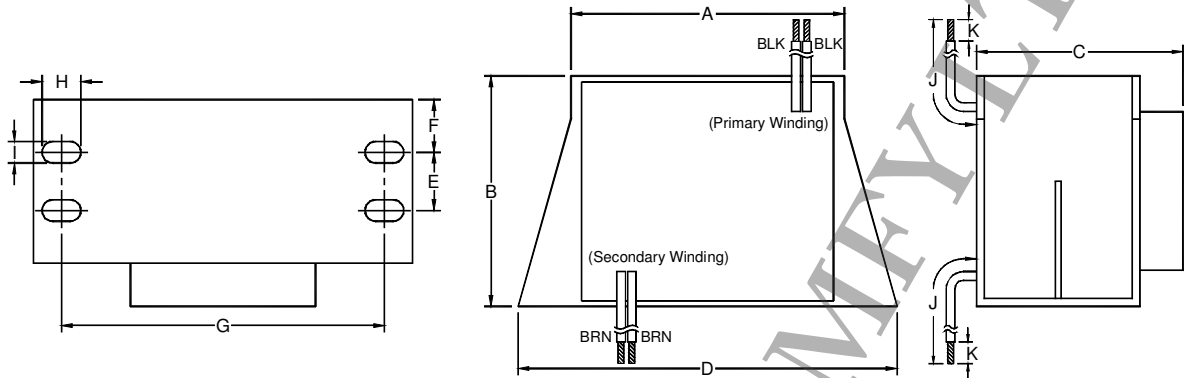
### Potting Shell – Type B



	A	B	C	D	E	F	G	H	I	J	K	Weight (g)
Dimension (mm)	63.5	53.5	45.5	4.0	φ0.8	5.0	32.5	50.0	40.0	8.8	φ2.4	600
Tolerance (mm)	±1.0	±1.0	±1.0	±1.0	±0.1	±0.2	±0.5	±1.0	±1.0	min.	±0.2	approx.

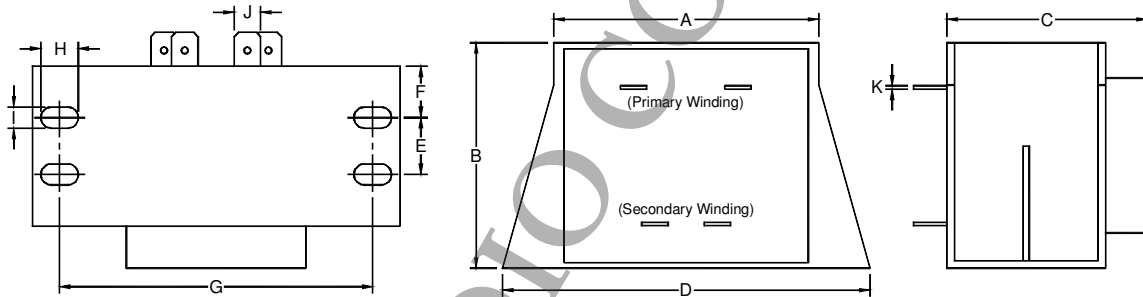
Note: Unused pins are omitted for standard parts. Unused pins can be provided upon request.

## Style – Flying Lead



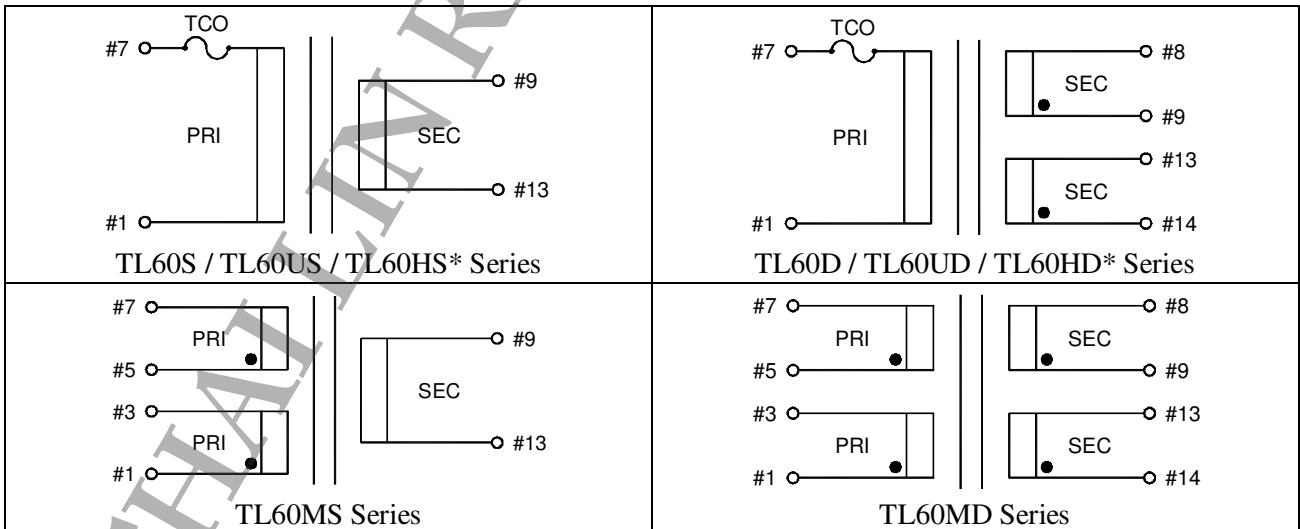
	A	B	C	D	E	F	G	H	I	J	K	Weight (g)
<b>Dimension (mm)</b>	63.5	53.5	45.5	88.0	13.5	11.5	75.0	9.0	5.0	250	5.0	600
<b>Tolerance (mm)</b>	±1.0	±1.0	±1.0	±1.0	±1.0	typ.	±1.0	±0.5	±0.2	±10	±1.0	approx.

## Style – Faston Tab



	A	B	C	D	E	F	G	H	I	J	K	Weight (g)
<b>Dimension (mm)</b>	63.5	53.5	45.5	88.0	13.5	11.5	75.0	9.0	5.0	6.3	0.8	600
<b>Tolerance (mm)</b>	±1.0	±1.0	±1.0	±1.0	±1.0	typ.	±1.0	±0.5	±0.2	±0.2	±0.1	approx.

## Schematics



\* The TCO is omitted for the TL60HS & TL60HD series.

Pins Connection (for dual windings items)	Primary	In Series	Pin 1 – Pin 7 (Pins 3, 5 short)
		In Parallel	Pin 1 – Pin 7 (Pins 1, 5 short; Pins 3, 7 short)
	Secondary	In Series	Pin 9 – Pin 13 (Pins 8, 14 short)
		In Parallel	Pin 9 – Pin 13 (Pins 8, 13 short; Pins 9, 14 short)

### Part Number Designation

Four designations are available. Use TL60S-060-3333 as example:

- 1) TL60S-060-3333 = Potting Shell A
- 2) TL60S-060-3333 (SB) = Potting Shell B (with fixing rails)
- 3) TL60S-060-3333FL = Flying Lead Style
- 4) TL60S-060-3333FT = Faston Tab Style

Note:

- a) Flying lead style is only available for the single primary + single secondary items.
- b) Faston tab style is only available for the single primary + single secondary items.
- c) In case of need, please add the appropriate suffixes in the part number when ordering.

Product Series	Primary (V)	Single Secondary			Dual Secondary			ta (°C)	Agency Approval
		Part Number	Secondary Rating		Part Number	Secondary Rating			
			(V)	(mA)		(V)	(mA)		
20VA	230	TL60S-060-3333	6	3333	TL60D-060-1666	2 x 6	1666	40	TUV CE
		TL60S-072-2777	7.2	2777	TL60D-072-1388	2 x 7.2	1388		
		TL60S-090-2222	9	2222	TL60D-090-1111	2 x 9	1111		
		TL60S-100-2000	10	2000	TL60D-100-1000	2 x 10	1000		
		TL60S-120-1666	12	1666	TL60D-120-0833	2 x 12	833		
		TL60S-150-1333	15	1333	TL60D-150-0666	2 x 15	666		
		TL60S-180-1111	18	1111	TL60D-180-0555	2 x 18	555		
		TL60S-240-0833	24	833	TL60D-240-0416	2 x 24	416		
	115	TL60US-060-3333	6	3333	TL60UD-060-1666	2 x 6	1666	40	UL506 UL5085-1/-2 C-UL
		TL60US-072-2777	7.2	2777	TL60UD-072-1388	2 x 7.2	1388		
		TL60US-090-2222	9	2222	TL60UD-090-1111	2 x 9	1111		
		TL60US-100-2000	10	2000	TL60UD-100-1000	2 x 10	1000		
		TL60US-120-1666	12	1666	TL60UD-120-0833	2 x 12	833		
		TL60US-150-1333	15	1333	TL60UD-150-0666	2 x 15	666		
TL60US-180-1111	18	1111	TL60UD-180-0555	2 x 18	555				
TL60US-240-0833	24	833	TL60UD-240-0416	2 x 24	416				

- Note:
- 1) TL60S & TL60D series are fail-safe transformers.
  - 2) TL60MS, TL60MD, TL60HS & TL60HD series are non-short-circuit proof transformers.

Product Series	Primary (V)	Single Secondary			Dual Secondary			ta (°C)	Agency Approval
		Part Number	Secondary Rating		Part Number	Secondary Rating			
			(V)	(mA)		(V)	(mA)		
20VA	115 (Parallel) or 230 (Series)	TL60MS-060-3333	6	3333	TL60MD-060-1666	2 x 6	1666	40	UL5085-1/-2 C-UL TUV CE
		TL60MS-072-2777	7.2	2777	TL60MD-072-1388	2 x 7.2	1388		
TL60MS-090-2222		9	2222	TL60MD-090-1111	2 x 9	1111			
TL60MS-100-2000		10	2000	TL60MD-100-1000	2 x 10	1000			
TL60MS-120-1666		12	1666	TL60MD-120-0833	2 x 12	833			
TL60MS-150-1333		15	1333	TL60MD-150-0666	2 x 15	666			
TL60MS-180-1111		18	1111	TL60MD-180-0555	2 x 18	555			
TL60MS-240-0833		24	833	TL60MD-240-0416	2 x 24	416			
400	TL60HS-060-3333	6	3333	TL60HD-060-1666	2 x 6	1666	40	--	
	TL60HS-072-2777	7.2	2777	TL60HD-072-1388	2 x 7.2	1388			
	TL60HS-090-2222	9	2222	TL60HD-090-1111	2 x 9	1111			
	TL60HS-100-2000	10	2000	TL60HD-100-1000	2 x 10	1000			
	TL60HS-120-1666	12	1666	TL60HD-120-0833	2 x 12	833			
	TL60HS-150-1333	15	1333	TL60HD-150-0666	2 x 15	666			
	TL60HS-180-1111	18	1111	TL60HD-180-0555	2 x 18	555			
	TL60HS-240-0833	24	833	TL60HD-240-0416	2 x 24	416			
22VA	230	TL60S-060-3666	6	3666	TL60D-060-1833	2 x 6	1833	40	TUV CE
		TL60S-072-3055	7.2	3055	TL60D-072-1527	2 x 7.2	1527		
		TL60S-090-2444	9	2444	TL60D-090-1222	2 x 9	1222		
		TL60S-100-2200	10	2200	TL60D-100-1100	2 x 10	1100		
		TL60S-120-1833	12	1833	TL60D-120-0916	2 x 12	916		
		TL60S-150-1466	15	1466	TL60D-150-0733	2 x 15	733		
		TL60S-180-1222	18	1222	TL60D-180-0611	2 x 18	611		
		TL60S-240-0916	24	916	TL60D-240-0458	2 x 24	458		
	115	TL60US-060-3666	6	3666	TL60UD-060-1833	2 x 6	1833	40	UL506 UI5085-1/-2 C-UL
		TL60US-072-3055	7.2	3055	TL60UD-072-1527	2 x 7.2	1527		
		TL60US-090-2444	9	2444	TL60UD-090-1222	2 x 9	1222		
		TL60US-100-2200	10	2200	TL60UD-100-1100	2 x 10	1100		
		TL60US-120-1833	12	1833	TL60UD-120-0916	2 x 12	916		
		TL60US-150-1466	15	1466	TL60UD-150-0733	2 x 15	733		
		TL60US-180-1222	18	1222	TL60UD-180-0611	2 x 18	611		
		TL60US-240-0916	24	916	TL60UD-240-0458	2 x 24	458		
115 (Parallel) or 230 (Series)	TL60MS-060-3666	6	3666	TL60MD-060-1833	2 x 6	1833	40	UL5085-1/-2 C-UL TUV CE	
	TL60MS-072-3055	7.2	3055	TL60MD-072-1527	2 x 7.2	1527			
	TL60MS-090-2444	9	2444	TL60MD-090-1222	2 x 9	1222			
	TL60MS-100-2200	10	2200	TL60MD-100-1100	2 x 10	1100			
	TL60MS-120-1833	12	1833	TL60MD-120-0916	2 x 12	916			
	TL60MS-150-1466	15	1466	TL60MD-150-0733	2 x 15	733			
	TL60MS-180-1222	18	1222	TL60MD-180-0611	2 x 18	611			
	TL60MS-240-0916	24	916	TL60MD-240-0458	2 x 24	458			
400	TL60HS-060-3666	6	3666	TL60HD-060-1833	2 x 6	1833	40	--	
	TL60HS-072-3055	7.2	3055	TL60HD-072-1527	2 x 7.2	1527			
	TL60HS-090-2444	9	2444	TL60HD-090-1222	2 x 9	1222			
	TL60HS-100-2200	10	2200	TL60HD-100-1100	2 x 10	1100			
	TL60HS-120-1833	12	1833	TL60HD-120-0916	2 x 12	916			
	TL60HS-150-1466	15	1466	TL60HD-150-0733	2 x 15	733			
	TL60HS-180-1222	18	1222	TL60HD-180-0611	2 x 18	611			
	TL60HS-240-0916	24	916	TL60HD-240-0458	2 x 24	458			

Note: 1) TL60S & TL60D series are fail-safe transformers.  
2) TL60MS, TL60MD, TL60HS & TL60HD series are non-short-circuit proof transformers.

Product Series	Primary (V)	Single Secondary			Dual Secondary			ta (°C)	Agency Approval
		Part Number	Secondary Rating		Part Number	Secondary Rating			
			(V)	(mA)		(V)	(mA)		
25VA	230	TL60S-060-4166	6	4166	TL60D-060-2083	2 x 6	2083	40	TUV CE
		TL60S-072-3472	7.2	3472	TL60D-072-1736	2 x 7.2	1736		
		TL60S-090-2777	9	2777	TL60D-090-1388	2 x 9	1388		
		TL60S-100-2500	10	2500	TL60D-100-1250	2 x 10	1250		
		TL60S-120-2083	12	2083	TL60D-120-1041	2 x 12	1041		
		TL60S-150-1666	15	1666	TL60D-150-0833	2 x 15	833		
		TL60S-180-1388	18	1388	TL60D-180-0694	2 x 18	694		
		TL60S-240-1041	24	1041	TL60D-240-0520	2 x 24	520		
	115	TL60US-060-4166	6	4166	TL60UD-060-2083	2 x 6	2083	40	UL506 UI5085-1/-2 C-UL
		TL60US-072-3472	7.2	3472	TL60UD-072-1736	2 x 7.2	1736		
		TL60US-090-2777	9	2777	TL60UD-090-1388	2 x 9	1388		
		TL60US-100-2500	10	2500	TL60UD-100-1250	2 x 10	1250		
		TL60US-120-2083	12	2083	TL60UD-120-1041	2 x 12	1041		
		TL60US-150-1666	15	1666	TL60UD-150-0833	2 x 15	833		
		TL60US-180-1388	18	1388	TL60UD-180-0694	2 x 18	694		
		TL60US-240-1041	24	1041	TL60UD-240-0520	2 x 24	520		
115 (Parallel) or 230 (Series)	TL60MS-060-4166	6	4166	TL60MD-060-2083	2 x 6	2083	40	UL5085-1/-2 C-UL TUV CE	
	TL60MS-072-3472	7.2	3472	TL60MD-072-1736	2 x 7.2	1736			
	TL60MS-090-2777	9	2777	TL60MD-090-1388	2 x 9	1388			
	TL60MS-100-2500	10	2500	TL60MD-100-1250	2 x 10	1250			
	TL60MS-120-2083	12	2083	TL60MD-120-1041	2 x 12	1041			
	TL60MS-150-1666	15	1666	TL60MD-150-0833	2 x 15	833			
	TL60MS-180-1388	18	1388	TL60MD-180-0694	2 x 18	694			
	TL60MS-240-1041	24	1041	TL60MD-240-0520	2 x 24	520			
400	TL60HS-060-4166	6	4166	TL60HD-060-2083	2 x 6	2083	40	--	
	TL60HS-072-3472	7.2	3472	TL60HD-072-1736	2 x 7.2	1736			
	TL60HS-090-2777	9	2777	TL60HD-090-1388	2 x 9	1388			
	TL60HS-100-2500	10	2500	TL60HD-100-1250	2 x 10	1250			
	TL60HS-120-2083	12	2083	TL60HD-120-1041	2 x 12	1041			
	TL60HS-150-1666	15	1666	TL60HD-150-0833	2 x 15	833			
	TL60HS-180-1388	18	1388	TL60HD-180-0694	2 x 18	694			
	TL60HS-240-1041	24	1041	TL60HD-240-0520	2 x 24	520			

Note: 1) TL60S & TL60D series are fail-safe transformers.  
2) TL60MS, TL60MD, TL60HS & TL60HD series are non-short-circuit proof transformers.