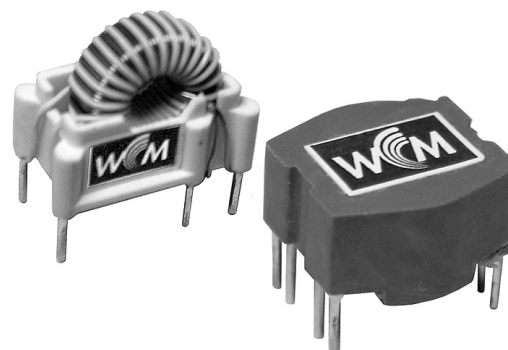


WCM601 Series

Current Sense Transformer

Product Description

West Coast Magnetics' 601 series current sense transformers are designed to accurately sense current at frequencies from 10 kHz to 600 kHz. They feature excellent linearity up to rated peak current. Compact size is optimized to minimize board space in two packaging configurations: through hole horizontal and vertical mounts.



Features and Benefits

Sense current to 30 amps — 10 kHz to 600 kHz operating frequency —
Design assistance from West Coast Magnetics

Engineering Data

Product Code	Turns	Minimum Inductance (mH)	DCR (mΩ)	V out (Volts)	I in (amps)	Terminating Resistor (Ω)	Hypot (Vac)
WCM601-01	25	0.57	0.07	1	1	25	3000
WCM601-02	50	2.30	0.18	1	1	50	3000
WCM601-03	100	9.10	0.57	1	1	100	3000
WCM601-04	200	36.00	3.40	1	1	200	3000
WCM601-05	25	0.83	0.18	1	1	25	3000
WCM601-06	50	3.30	0.41	1	1	50	3000
WCM601-07	100	13.20	1.31	1	1	100	3000
WCM601-08	200	52.80	4.15	1	1	200	3000



Peak Sense Current (amps) vs Frequency of Operation

Product Code	50 kHz	100 kHz	200 kHz	400 kHz	600 kHz
WCM601-01	—	—	30	30	30
WCM601-02	—	30	30	30	—
WCM601-03	30	30	—	—	—
WCM601-04	30	—	—	—	—
WCM601-05	—	—	30	30	30
WCM601-06	—	30	30	30	—
WCM601-07	30	30	—	—	—
WCM601-08	30	—	—	—	—

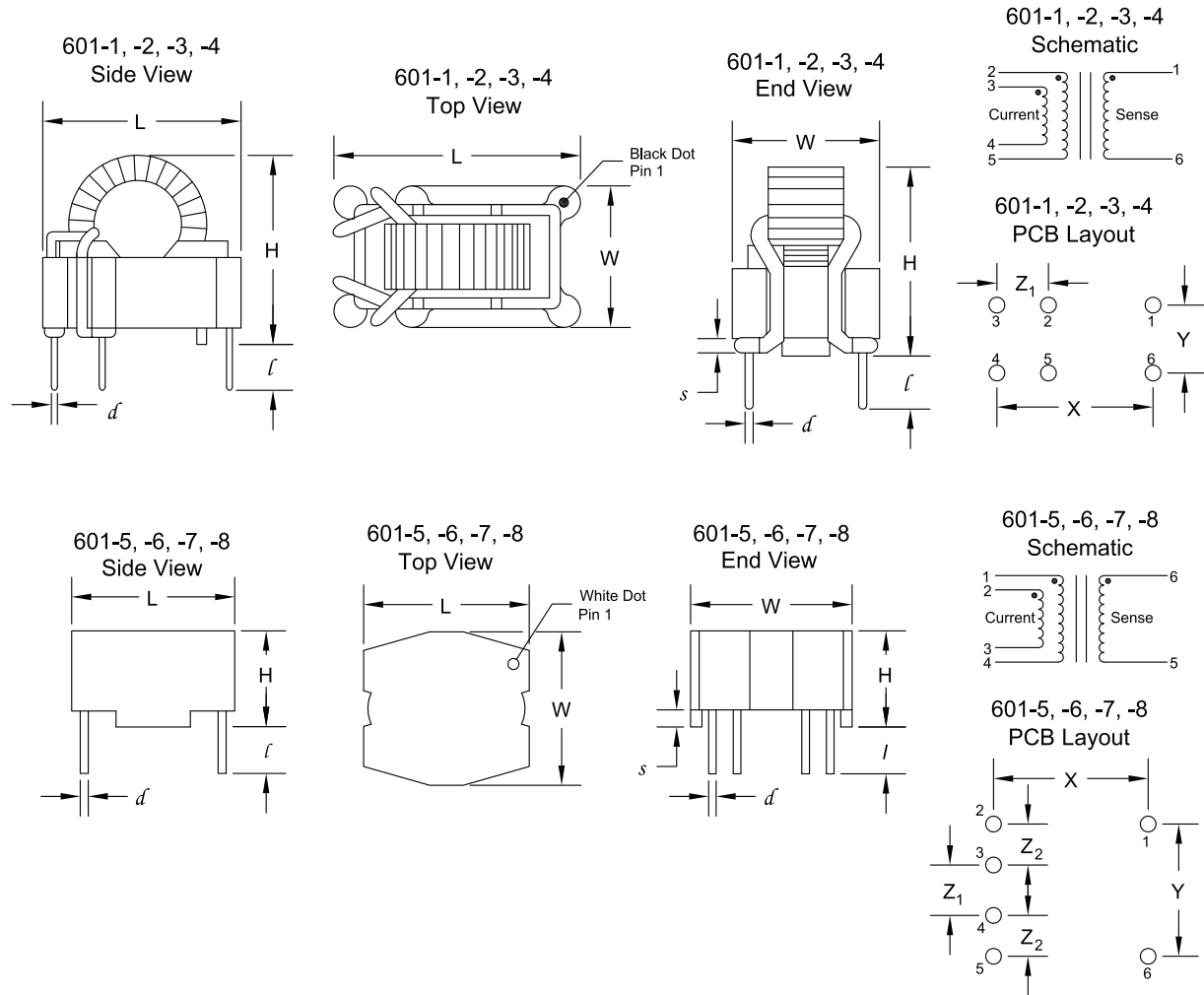
Note:

1. For reliable performance at peak rated sense current, the sense windings must be connected in parallel to split the load.
2. For fully optimal performance, operate in recommended areas only. Within these ranges magnetizing current will be less than 1% of peak rated sense current and temperature rise will not exceed 40° C. Check with West Coast Magnetics for operation outside recommended areas.

Schematics WCM601 Series

Product Code	L	W	H	s	ℓ	d	X	Y	Z_1	Z_2
WCM601-01										
WCM601-02	<u>0.800</u>	<u>0.450</u>	<u>0.750</u>	<u>0.080</u>	<u>0.175</u>	<u>0.025</u>	<u>0.700</u>	<u>0.350</u>	<u>0.200</u>	NA
WCM601-03	20.3	11.4	19.1	2.0	4.4	0.6	17.8	8.9	5.1	
WCM601-04										
WCM601-05										
WCM601-06	<u>0.680</u>	<u>0.630</u>	<u>0.360</u>	<u>0.060</u>	<u>0.191</u>	<u>0.031</u>	<u>0.600</u>	<u>0.400</u>	<u>0.200</u>	<u>0.100</u>
WCM601-07	17.3	16.0	9.1	1.5	4.9	0.79	15.2	10.2	5.1	2.5
WCM601-08										

Schematics WCM601 Series Continued



Note:

1. *601-1, 601-2, 601-3, 601-4 — .025" square pin
* 601-5, 601-6, 601-7, 601-8 — .031" round pin

2. All materials of construction minimum Class B 130° C rated.

Dimensions:

Inches
mm

Note:

Please specify
vertical or horizontal
mount with your
order.