

WCM602 Series

Current Sense Transformer

Product Description

West Coast Magnetics' 602 series current sense transformers can accurately sense up to 45 amps peak current. They feature excellent linearity in the frequency range of 10 kHz to 500 kHz. The 602 series current sense transformers are available in either a vertical or horizontal mount style and are designed to comply with safety agency requirements including UL, CSA, VDE and IEC standards.



Features and Benefits

Sense current to 45 amps – 10 kHz to 500 kHz operating frequency –
Design assistance from West Coast Magnetics

Engineering Data

Product Code	Turns	Minimum Inductance (mH)	Nominal DCR (mΩ)	V out (Volts)	I in (amps)	Terminating Resistor (Ω)	Hypot (Vac)
WCM602-01	25	0.7	95	1	1	25	3750
WCM602-02	50	2.7	260	1	1	50	3750
WCM602-03	100	11.1	1000	1	1	100	3750
WCM602-04	200	44.0	3300	1	1	200	3750
WCM602-05	25	0.7	95	1	1	25	3750
WCM602-06	50	2.7	260	1	1	50	3750
WCM602-07	100	13.20	1000	1	1	100	3750
WCM602-08	200	44.0	3300	1	1	200	3750



Peak Sense Current (amps) vs Frequency of Operation

Product Code	25 kHz	50 kHz	100 kHz	200 kHz	400 kHz
WCM602-01	—	—	—	45	45
WCM602-02	—	45	45	45	—
WCM602-03	45	45	45	—	—
WCM602-04	45	—	—	—	—
WCM602-05	—	—	—	45	45
WCM602-06	—	45	45	45	—
WCM602-07	45	45	45	—	—
WCM602-08	45	—	—	—	—

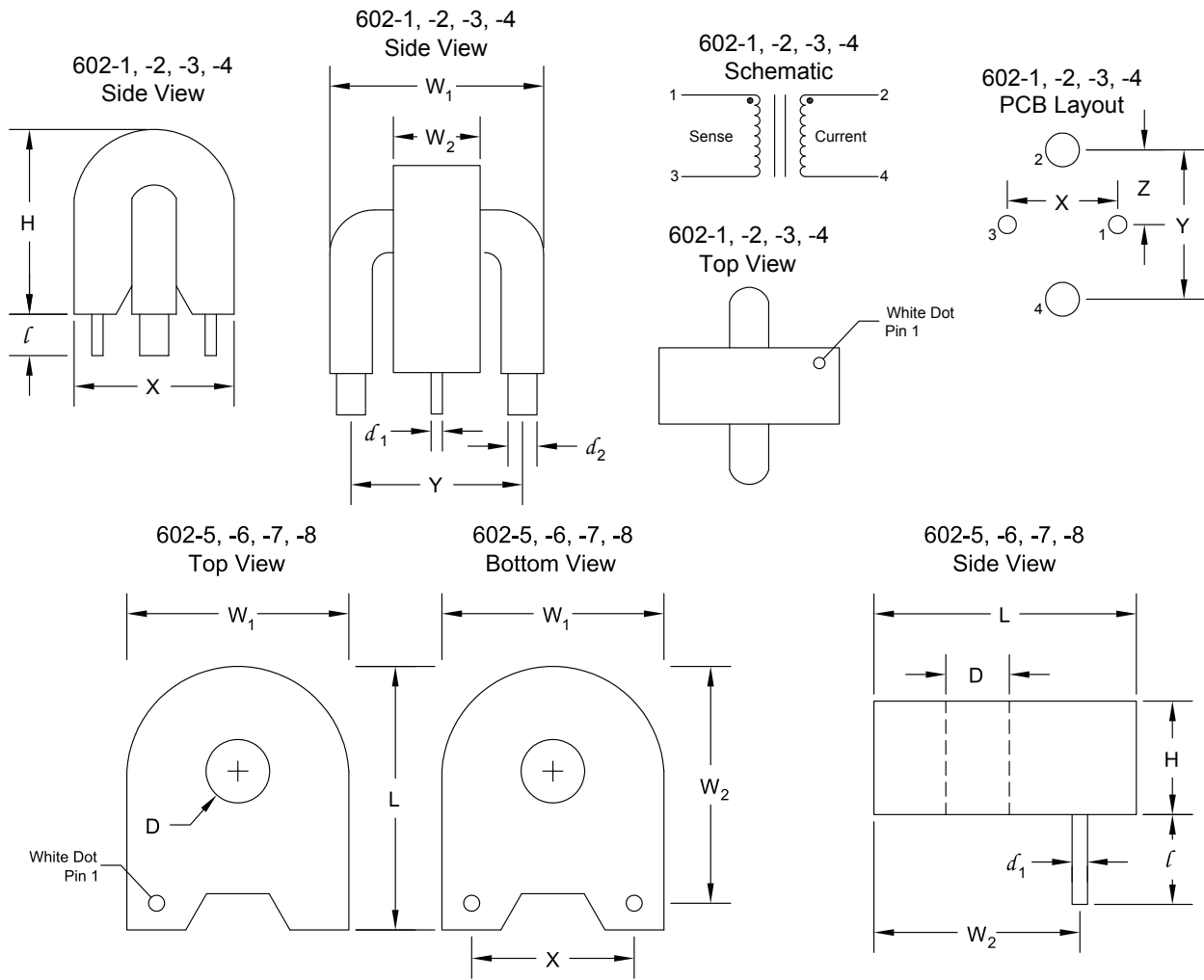
Note:

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 WCM602 Series

Product Code	L	W ₁	W ₂	H	D	X	Y	Z	ℓ	d ₁	d ₂
WCM602-01											
WCM602-02	<u>0.675</u>	<u>0.800</u>	<u>0.400</u>	<u>0.800</u>	NA	<u>0.500</u>	<u>0.700</u>	<u>0.350</u>	<u>0.200</u>	<u>0.031</u>	<u>0.125</u>
WCM602-03	17.1	20.3	10.2	20.3		12.7	17.8	8.9	5.1	0.79	3.2
WCM602-04											
WCM602-05											
WCM602-06	<u>0.787</u>	<u>0.661</u>	<u>0.628</u>	<u>0.410</u>	<u>0.197</u>	<u>0.492</u>	NA	NA	<u>0.375</u>	<u>0.031</u>	NA
WCM602-07	20.0	16.8	16.0	10.4	5.00	12.5			9.5	0.79	
WCM602-08											

Schematics WCM602 Series Continued



Note:

1. 602 - 5, 6, 7, 8 require single turn sense wire.
2. All materials of construction minimum Class B 130° C rated.

<p>Dimensions:</p> <p>Inches mm</p>	<p>Note:</p> <p>Please specify vertical or horizontal mount with your order.</p>
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