

WCM603 Series

Current Sense Transformer

Product Description

West Coast Magnetics' 603 series current sense transformers are an excellent choice for sensing current to 20 amps in a low profile SMD package. Designed for switching power supply applications, they will accommodate frequencies from 100 kHz to 1 MHz with excellent linearity. The product also provides 3000 Vac isolation between the current and sense windings for safety agency compliance.



Features and Benefits

Sense current to 20 amps in a low profile SMD package – Tape and reel –
3000 Vac isolation – Excellent linearity

Engineering Data

Product Code	Turns	Minimum Inductance (mH)	Nominal DCR (mΩ)	V out (Volts)	I in (amps)	Terminating Resistor (Ω)	Hypot (Vac)
WCM603-01	10	78	15	1	1	10	3000
WCM603-02	16	196	38	1	1	16	3000
WCM603-03	25	480	93	1	1	25	3000
WCM603-04	40	1224	235	1	1	40	3000
WCM603-05	10	82	11	1	1	10	3000
WCM603-06	16	210	27	1	1	16	3000
WCM603-07	25	351	68	1	1	25	3000
WCM603-08	40	1330	173	1	1	40	3000
WCM603-09	10	124	14	1	1	10	3000
WCM603-10	16	317	34	1	1	16	3000
WCM603-11	25	832	84	1	1	25	3000
WCM603-12	40	1982	215	1	1	40	3000



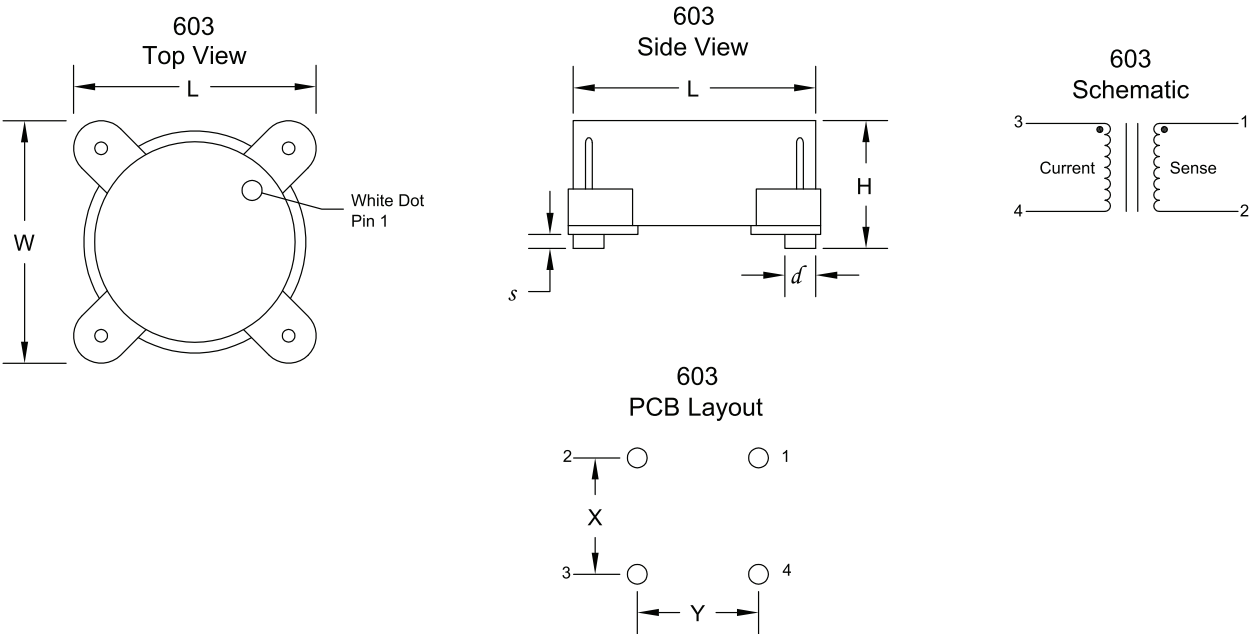
Peak Sense Current (amps) vs Frequency of Operation

Product Code	100 kHz	200 kHz	400 kHz	600 kHz	1 MHz
WCM603-01	—	—	10	9	6
WCM603-02	—	10	10	10	10
WCM603-03	—	10	10	10	10
WCM603-04	10	10	10	10	—
WCM603-05	—	—	—	—	9
WCM603-06	—	—	15	15	15
WCM603-07	15	15	15	15	—
WCM603-08	15	15	15	15	—
WCM603-09	—	—	—	15	12
WCM603-10	—	20	20	20	20
WCM603-11	20	20	20	20	—
WCM603-12	20	20	20	20	NA

Schematics WCM603 Series

Product Code	L	W	H	S	<i>d</i>	X	Y
WCM603-01							
WCM603-02	<u>0.430</u>	<u>0.430</u>	<u>0.250</u>	<u>0.030</u>	<u>0.060</u>	<u>0.307</u>	<u>0.307</u>
WCM603-03	10.9	10.9	6.4	0.8	1.5	7.8	7.8
WCM603-04							
WCM602-05							
WCM602-06	<u>0.530</u>	<u>0.530</u>	<u>0.290</u>	<u>0.030</u>	<u>0.060</u>	<u>0.400</u>	<u>0.400</u>
WCM602-07	13.5	13.5	7.4	0.8	1.5	10.2	10.2
WCM602-08							
WCM602-09							
WCM602-10	<u>0.630</u>	<u>0.630</u>	<u>0.310</u>	<u>0.030</u>	<u>0.070</u>	<u>0.495</u>	<u>0.495</u>
WCM602-11	16.0	16.0	7.9	0.8	1.8	12.6	12.6
WCM602-12							

Schematics WCM603 Series Continued



Note:
1. All materials of construction minimum Class B 130° C rated.

Dimensions:

Inches

mm

Note:

Please specify vertical or horizontal mount with your order.