



Customers should verify actual device performance in their specific applications.

For information on specific applications,
download Bourns' application notes:

- [DRAM Applications](#)
- [Dual Terminator Resistor Networks](#)
- [R/2R Ladder Networks](#)
- [SCSI Applications](#)

4600X Series - Thick Film Conformal SIPs

BOURNS®

Isolated Resistors (102 Circuit)

Model 4600X-102-RC
4, 6, 8, 10, 12, 14 Pin



These models incorporate 2 to 7
isolated thick-film resistors of equal
value, each connected between two
pins.

Resistance Tolerance

10 ohms to 49 ohms±1 ohm
50 ohms to 5 megohms±2 %*
Above 5 megohms ±5 %

Power Rating per Resistor

At 70 °C 0.30 watt

Power Temperature Derating Curve



Bussed Resistors (101 Circuit)

Model 4600X-101-RC
4 through 14 Pin



These models incorporate 3 to 13
thick-film resistors of equal value, each
connected between a common bus
(pin 1) and a separate pin.

Resistance Tolerance

10 ohms to 49 ohms±1 ohm
50 ohms to 5 megohms±2 %*
Above 5 megohms ±5 %

Power Rating per Resistor

At 70 °C 0.20 watt

Power Temperature Derating Curve



Dual Terminator (104 Circuit)

Model 4600X-104-R1/R2
4 through 14 Pin



The 4608X-104 (shown above) is an 8-
pin configuration and terminates 6 lines.
Pins 1 and 8 are common for ground
and power, respectively. Twelve thick-
film resistors are paired in series be-
tween the common lines (pins 1 and 8).

Resistance Tolerance

Below 100 ohms.....±2 ohms
100 ohms to 5 megohms±2 %*
Above 5 megohms ±5 %

Power Rating per Resistor

At 70 °C 0.20 watt

Power Temperature Derating Curve



Popular Resistance Values (101, 102 Circuits)**

Ohms	Code	Ohms	Code	Ohms	Code	Ohms	Code	Ohms	Code
10	100	180	181	1,800	182	15,000	153	120,000	124
22	220	270	271	2,200	222	18,000	183	150,000	154
27	270	330	331	2,700	272	20,000	203	180,000	184
33	330	390	391	3,300	332	22,000	223	220,000	224
39	390	470	471	3,900	392	27,000	273	270,000	274
47	470	560	561	4,700	472	33,000	333	330,000	334
56	560	680	681	5,600	562	39,000	393	390,000	394
68	680	820	821	6,800	682	47,000	473	470,000	474
82	820	1,000	102	8,200	822	56,000	563	560,000	564
100	101	1,200	122	10,000	103	68,000	683	680,000	684
120	121	1,500	152	12,000	123	82,000	823	820,000	824
150	151					100,000	104	1,000,000	105

* ±1 % tolerance is available by adding suffix code "F" after the resistance code.

**Non-standard values available, within resistance range.

Popular Resistance Values (104 Circuit)**

Resistance			
Ohms		Code	
R ₁	R ₂	R ₁	R ₂
160	240	161	241
180	390	181	391
220	270	221	271
220	330	221	331
330	390	331	391
330	470	331	471
3,000	6,200	302	622

REV. 04/10

Specifications are subject to change without notice.
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Mouser Electronics

Authorized Distributor

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Bourns:

4613X-101-681LF	4612X-102-274LF	4608X-102-184LF	4606X-101-562LF	4606X-102-562LF	4608X-101-184LF
4609X-101-394LF	4608X-101-561LF	4608X-102-561LF	4608X-101-101LF	4608X-102-101LF	4605X-101-333LF
4611X-101-332LF	4611X-101-392LF	4612X-101-824LF	4608X-102-181LF	4608X-101-181LF	4608X-102-121LF
4612X-102-824LF	4614X-102-124LF	4608X-101-121LF	4605X-101-393LF	4614X-101-124LF	4605X-102-393LF
4608X-102-151LF	4608X-101-151LF	4610X-101-683LF	4610X-102-683LF	4605X-102-333LF	4614X-102-182LF
4614X-101-182LF	4614X-101-122LF	4614X-102-122LF	4612X-102-822LF	4614X-101-152LF	4612X-101-822LF
4614X-102-152LF	4608X-102-104LF	4608X-101-104LF	4613X-101-474LF	4605X-102-222LF	4608X-101-224LF
4608X-102-224LF	4606X-101-564LF	4605X-101-272LF	4610X-102-203LF	4611X-101-561LF	4606X-102-564LF
4610X-101-273LF	4610X-102-273LF	4610X-101-203LF	4610X-101-154LF	4610X-102-223LF	4610X-102-154LF
4605X-102-272LF	4605X-101-222LF	4610X-101-223LF	4612X-102-564LF	4604X-102-105LF	4604X-102-102LF
4612X-101-564LF	4610X-101-822LF	4608X-101-273LF	4608X-102-273LF	4608X-102-202LF	4610X-102-822LF
4614X-102-223LF	4614X-101-203LF	4614X-101-223LF	4614X-102-203LF	4605X-102-100LF	4614X-102-273LF
4614X-101-273LF	4605X-102-560LF	4607X-101-331LF	4607X-101-391LF	4612X-102-681LF	4612X-101-681LF
4611X-101-333LF	4610X-102-100LF	4604X-102-183LF	4604X-102-123LF	4614X-102-822LF	4604X-101-183LF
4604X-101-123LF	4610X-102-390LF	4611X-101-393LF	4606X-102-560LF	4614X-101-822LF	4610X-102-560LF
4613X-101-221LF	4610X-102-330LF	4604X-102-103LF	4604X-101-103LF	4604X-101-333LF	4604X-101-271LF
4604X-102-271LF	4607X-101-151LF	4607X-101-683LF	4604X-102-333LF		