

VISHAY/THIN FILM Resistor Networks

VSSR AND VSOR SERIES- DUAL IN-LINE RESISTOR NETWORKS - THIN FILM NITRIDE ON SILICON

Features:

- Surface mount compatible
- TCR-Absolute: -55°C to +125°C
- Choice of package sizes: VTSR (TSSOP) JEDEC MC-153, VSSR (SSOP or QSO) JEDEC MS-137, VSOR (SOIC narrow) JEDEC MS-012
- Moisture sensitivity level 1 (per IPC/JEDEC STD-20C)

Application for Resistors with one Pin Common/Bussed:

- MOS/ROM Pull-up/Pull-down
- TTL Input Pull-down
- Open Collector Pull-up
- Digital Pulse Squaring
- TTL Unused Gate Pull-up
- Power Driven Pull-up
- High Speed Parallels Pull-up

Applications for Isolated Resistors:

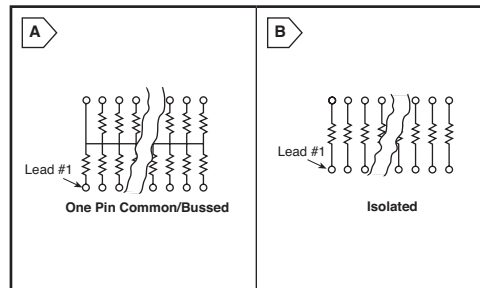
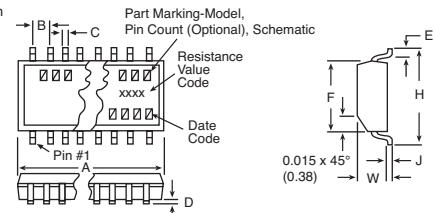
- Power Driven Pull-up
- LED Current Limiting
- Powergate Pull-up
- ECL Output Pull-down
- Line Termination
- TTL Input Pull-down



Model	A			B (Ref.)	C (Ref.)	D	E (Typ.)	F	H	J (Ref.)	W
	16 Pin	20 Pin	24 Pin								
VSSR-xxxx (In.)	0.193 ± 0.004	0.341 ± 0.003	0.341 ± 0.003	0.025	0.01	0.006	0.025	0.154 ± 0.003	0.236 ± 0.008	0.01	0.064 ± 0.005
VSSR-xxxx (mm)	4.90 ± 0.10	8.66 ± 0.08	8.66 ± 0.08	0.64	0.25	0.15	0.64	3.91 ± 0.08	5.99 ± 0.20	0.25	1.63 ± 0.13
VSOR-xxxx (In.)	0.390 ± 0.010	NA	NA	0.05	0.016	0.008	0.03	0.152 ± 0.003	0.236 ± 0.005	0.008	0.064 ± 0.005
VSOR-xxxx (mm)	9.91 ± 0.25	NA	NA	1.27	0.41	0.2	0.76	3.86 ± 0.08	5.99 ± 0.13	0.2	1.63 ± 0.13

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Vishay Part No.	Fig.	No. of Pins	Value Ω	Tolerance	Price Each			
						1	25	50	100
71-VSOR1601102JT	VSOR1601102JT	A	16	1K	5%	3.15	2.22	2.00	1.80
71-VSOR1601472JT	VSOR1601472JT	A	16	4.7K	5%	3.15	2.22	2.00	1.80
71-VSOR1601103JT	VSOR1601103JT	A	16	10K	5%	3.15	2.22	2.00	1.80
71-VSSR1603103GT	VSSR1603103GT	B	16	10K	2%	2.23	1.79	1.51	1.32
71-VSSR1601472JT	VSSR1601472JT	A	16	4.7K	5%	1.73	1.43	1.20	1.07
71-VSSR1601103JT	VSSR1601103JT	A	16	10K	5%	1.73	1.43	1.20	1.07
71-VSSR1603100JT	VSSR1603100JT	B	16	10	5%	2.48	2.01	1.67	1.53
71-VSSR1603330JT	VSSR1603330JT	B	16	33	5%	2.48	2.01	1.67	1.53
71-VSSR1603102JT	VSSR1603102JT	B	16	1K	5%	1.73	1.43	1.20	1.07
71-VSSR1603472JT	VSSR1603472JT	B	16	4.7K	5%	1.73	1.43	1.20	1.07
71-VSSR1603103JT	VSSR1603103JT	B	16	10K	5%	1.73	1.43	1.20	1.07
71-VSSR2001472JT	VSSR2001472JT	A	20	4.7K	5%	2.23	1.69	1.44	1.32
71-VSSR2001103GT	VSSR2001103GT	A	20	10K	2%	2.48	2.01	1.67	1.53
71-VSSR2001103JT	VSSR2001103JT	A	20	10K	5%	2.23	1.69	1.44	1.32
71-VSSR2401102JT	VSSR2401102JT	A	24	1K	5%	2.23	1.69	1.44	1.32
71-VSSR2401103JT	VSSR2401103JT	A	24	10K	5%	2.23	1.69	1.44	1.32



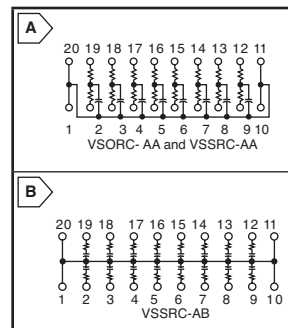
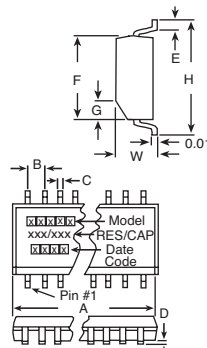
VSORC AND VSSRC SERIES-T-FILTER AND TERMINATION RESISTOR/CAPACITOR NETWORKS - THIN FILM NITRIDE ON SILICON



Model	A	B (Ref.)	C (Ref.)	D	E (Typ.)	F	G	H	J (Ref.)	W
VSSRC20-AB (In.)	.344 Max.	.025	.01	.006	.025	.154 ± 0.003	.015 x 45°	.236 ± 0.008	.01	.064 ± 0.005
VSSRC20-AB (mm)	8.74 Max.	.64	.25	.15	.64	3.9	.38	6.0 ± 0.20	.25	1.60
VSSRC20-AB (In.)	.500 ± 0.10	.05	.016	.008	.03	.293 ± 0.003	.025 x 45°	.406 ± 0.005	.01	.100 ± 0.005
VSSRC20-AB (mm)	12.7 ± 0.25	1.27	.41	.20	.76	7.44	0.64	10.31	.25	2.59

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Vishay Part No.	Fig.	No. of Pins	Value Ω	Tolerance	Price Each			
						1	25	50	100
71-VSSRC20250K/500M	VSSRC20A250K/500M	A	20	25Ω/50pF	20%	4.99	4.02	3.22	3.04
71-VSSRC20470K/330M	VSSRC20AB470K/330M	B	20	47Ω/33pF	20%	4.00	3.36	2.84	2.50



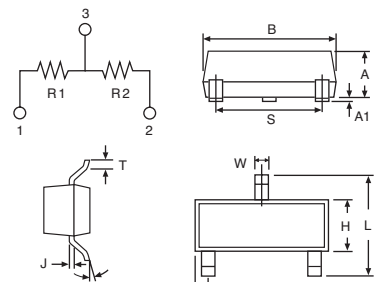
MPM SERIES - MOLDED, SOT-23 RESISTOR NETWORKS / DIVIDERS

Specifications:

- TCR: Tracking ± 2ppm/°C (typical) Absolute ± 25ppm/°C
- Tolerance: Ratio ± 0.5% to ± 0.01% Absolute ± 1.0% to ± 0.05%
- Power Rating: Resistor 100mW; Package 200mW
- Working Voltage: 100 Volts Max.
- Operating Temperature Range: - 55°C to + 125°C
- Shelf Life Stability (Ratio): 50ppm Max., 1 year @ + 25°C



MOUSER STOCK NO.	Vishay Part No.	Value Ω		Ratio	Tolerance	Ratio Tol.	Price Each				
		R1	R2				R2:R1	1	10	25	50
Networks											
71-MPMT1001FW	MPMT1001FWS	1K	1K	1:1	1%	0.5%	10.35	8.91	6.97	6.42	6.17
71-MPMT2001AT	MPMT2001AT5	2K	2K	1:1	0.1%	0.1%	6.48	5.67	4.86	4.37	3.88
71-MPMT2001BW	MPMT2001BWS	2K	2K	1:1	0.1%	0.1%	3.29	2.83	2.21	2.04	1.96
71-MPMT5001AW	MPMT5001AWS	5K	5K	1:1	0.1%	0.1%	4.29	3.67	2.93	2.69	2.54
71-MPMT1002AT5	MPMT1002AT5	10K	10K	1:1	0.1%	0.1%	6.48	5.67	4.86	4.37	3.88
71-MPMT1002BW	MPMT1002BWS	10K	10K	1:1	0.1%	0.1%	4.29	3.67	2.93	2.69	2.54
71-MPMT1002DW	MPMT1002DWS	10K	10K	1:1	0.5%	0.1%	8.35	7.19	5.63	5.18	4.98
71-MPMT2002AT	MPMT2002AT5	20K	20K	1:1	0.1%	0.1%	4.29	3.67	2.93	2.69	2.54
Dividers											
71-MPMT1001/1002AW	MPMT1001/1002AWS	1K	10K	10:1	0.1%	0.1%	11.32	9.91	8.49	7.64	6.79
71-MPMT1001/2002AW	MPMT1001/2002AWS	1K	20K	20:1	0.1%	0.1%	10.74	9.25	7.23	6.66	6.40
71-MPMT1001/5002CW	MPMT1001/5002CWS	1K	50K	50:1	0.25%	0.1%	22.16	19.95	17.73	15.52	13.30
71-MPMT1001/1003AW	MPMT1001/1003AWS	1K	100K	100:1	0.1%	0.1%	22.16	19.95	17.73	15.52	13.30
71-MPMT2001/1002AW	MPMT2001/1002AWS	2K	10K	5:1	0.1%	0.1%	11.32	9.91	8.49	7.64	6.79
71-MPMT5001/1002BT	MPMT5001/1002BT5	5K	10K	2:1	0.1%	0.1%	4.96	4.27	3.34	3.08	2.96
71-MPMT5001/1002DW	MPMT5001/1002DWS	5K	10K	2:1	0.5%	0.1%	8.35	7.19	5.63	5.18	4.98
71-MPMT5001/1002FW	MPMT5001/1002FWS	5K	10K	2:1	1%	0.5%	8.00	6.88	5.39	4.96	4.76



	Dimensions			
	Minimum		Maximum	
	in.	(mm)	in.	(mm)
A	0.031	(0.79)	0.04	(1.02)
A1	0.001	(0.02)	0.004	(0.1)
B	0.105	(2.67)	0.12	(3.05)
S	0.071	(1.8)	0.079	(2)
W	0.015	(0.38)	0.021	(0.54)
L	0.083	(2.1)	0.098	(2.5)
H	0.047	(1.2)	0.055	(1.4)
T	0.005	(0.13)	0.01	(0.25)
J	0.0035	(0.089)	0.0059	(0.15)
K	0.017	(0.44)	0.022	(0.55)
Ø	0	(0)	8°	(8°)