

Power Wirewound Resistors

Vishay



FEATURES

- Power ratings from 0.125 watts to 1000 watts
- Value ranges from 0.0005Ω to 500KΩ
- Established reliability and MIL styles
- Special and custom styles available

PRODUCT DESCRIPTION	TYPE	WATTS AT 70°C	T.C. ppm°C	TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)		
				MIN.	MAX.		BODY WIDTH	BODY LENGTH	BODY HEIGHT
Wirewound Resistor Surface Mount Precision Power <small>Non-inductive styles available designated WSN Resistor</small>	WSC-1/2	0.5	50-90	0.5	5	0.1-4.99	3.307	5.588	2.821
	WSC-1	1.0	20-50-90	0.5	5	0.1-2.77K	3.937	6.858	3.171
	WSC-2	2.0	20-50-90	0.5	5	0.1-4.92K	7.107	12.068	4.494
	WSC2515	1.0	20-50-90	0.5	5	0.1-2.77K	3.937	6.858	3.171
	WSC4527	2.0	20-50-90-150	0.5	5	0.1-4.92K	7.107	12.068	4.494
	WSC6927	3.0	20-50-90-150	0.5	5	0.1-8K	7.107	18.343	7.491
Power Metal Strip® Resistor <small>Low value Surface Mount</small>	WSL0805	0.125	75	0.5	1	0.01-0.2	1.524	2.284	0.457
	WSL1206	0.25	75-110-150-275	0.5	1	0.002-0.2	1.854	3.454	0.889
	WSL2010	0.50	75-110-150-275	0.5	1	0.001-0.5	2.794	5.334	0.889
	WSL2512	1.0	75-110-150-275	0.5	1	0.001-0.5	3.434	6.604	0.889
	WSL3637	3.0	50	0.5	1	0.003-0.01	9.394	9.654	0.889
Power Metal Strip® High Power Resistor <small>Low value Surface Mount</small>	WSL0805-18	0.25	75	0.5	1	0.01-0.2	1.524	2.284	0.457
	WSL1206-18	0.5	75-110-150-275	0.5	1	0.002-0.2	1.854	3.454	0.889
	WSL2010-18	1.0	75-110-150-275	0.5	1	0.001-0.5	2.794	5.334	0.889
	WSL2512-18	2.0	75-110-150-275	0.5	1	0.001-0.01	3.434	6.604	0.889
Power Metal Strip® 4-Terminal Resistor <small>Low value Surface Mount</small>	WSK2512	1.00	35-75-250	0.5	1	0.001-0.025	3.434	6.604	0.889
Power Metal Strip® Resistor <small>Low value Surface Mount</small>	WSR-2	2.0	75-110	0.5	5	0.001-1.0	7.107	12.373	2.537
	WSR-3	3.0	75-110	0.5	5	0.001-0.2	7.107	12.373	2.537
	WSR-5	5.0	75-110	0.5	5	0.0075-0.3	7.107	12.373	2.537
Metal Film Resistor Surface Mount Power	WSF2012	0.5	100	0.5	5	5-1.44K	3.307	5.588	2.821
	WSF2515	1.0	100	0.5	5	26.5-10K	3.937	6.858	3.171
	WSF4527	2.0	100	0.5	5	10-100K	7.107	12.068	4.494
Wirewound Resistor High Wattage Surface Mount <small>Silicone or cement coated Z-bend terminals</small>	WSZ6720	1.8 at 25°C	-10...-80 +100...+180	1	10	1.0-3.3K	5.0	17.0	6.0
	WSZ7532	3.75 at 25°C	30-50	1	10	1.0-15K	8.18	19.86	8.89
Wirewound Resistor High Wattage Surface Mount <small>Low Board Temperatures Fireproof Construction</small>	CPSM-3	3	300-600	5	10	0.1-1K	10.516	24.028	12.548
	CPSM-5	5	300-600	5	10	0.1-1K	10.516	27.940	12.548
	CP-2M	4	50-90	1	5	0.1-2.74K	7.163	18.898	7.468
PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C	T.C. ppm°C	TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)		
				MIN.	MAX.		BODY WIDTH	BODY LENGTH	BODY HEIGHT
Wirewound Resistor Surface Mount Precision Power <small>Non-inductive version also available (Eg: MSP2B_NI)</small>	MSP1B	1.0	25-50-100	0.1	5	0.04-2.2K	3.8	6.9	3.8
	MSP2B	2.0	25-50-100	0.1	5	0.04-4.7K	7.0	11.4	5.0
	MSP3B	2.5	25-50-100	0.1	5	0.04-13K	7.0	14.8	6.6



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C		TOLERANCE ± %	RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS
		MIN.	MAX.		BODY Ø	BODY LENGTH	LEAD Ø		
Established Reliability Wirewound Resistors Axial Leads Silicone Coated Styles ESN and EGN are Non-Inductive MIL-PRF-39007 (tolerances 0.1%, 0.5% and 1% only)	EGS-1-80	1	0.1	1	0.1-1K	2.67	7.18	0.546	MIL Type RWR81S
	EGW-1	1	0.1	1	0.1-1K	2.67	7.18	0.546	MIL Type RWR81W
	EGN-1-80	1	0.1	1	0.1-499	2.67	7.18	0.546	MIL Type RWR81N
	EGN-1-10	1	0.1	1	0.1-499	2.67	7.18	0.546	MIL Type RWR81Z
	EGS-2	1.5	0.1	1	0.1-1.3K	2.39	8.33	0.546	MIL Type RWR82S
	EGW-2	1.5	0.1	1	0.1-1.3K	2.39	8.33	0.546	MIL Type RWR82W
	EGN-2	1.5	0.1	1	0.1-649	2.39	8.33	0.546	MIL Type RWR82N
	EGN-2-10	1.5	0.1	1	0.1-649	2.39	8.33	0.546	MIL Type RWR82Z
	EGS-3-80	2	0.1	1	0.1-3.16K	3.18	11.1	0.546	MIL Type RWR80S
	EGW-3	2	0.1	1	0.1-3.16K	3.18	11.1	0.546	MIL Type RWR80W
	EGN-3-80	2	0.1	1	0.1-1.58K	3.18	11.1	0.546	MIL Type RWR80N
	EGN-3-10	2	0.1	1	0.1-1.58K	3.18	11.1	0.546	MIL Type RWR80Z
	ESS-2A	2	0.1	1	0.1-12.1K	5.54	22.2	0.864	MIL Type RWR71S
	ESW-2A	2	0.1	1	0.1-12.1K	5.54	22.2	0.864	MIL Type RWR71W
	ESN-2A	2	0.1	1	0.1-6.04K	5.54	22.2	0.864	MIL Type RWR71N
	ESN-2A-1	2	0.1	1	0.1-6.04K	5.54	22.2	0.864	MIL Type RWR71Z
	ESS-2B	3	0.1	1	0.1-4.12K	5.54	15.8	0.864	MIL Type RWR89S
	ESW-2B	3	0.1	1	0.1-4.12K	5.54	15.8	0.864	MIL Type RWR89W
	ESN-2B	3	0.1	1	0.1-2.05K	5.54	15.8	0.864	MIL Type RWR89N
	ESN-2B-10	3	0.1	1	0.1-2.05K	5.54	15.8	0.864	MIL Type RWR89Z
	ESS-5	5	0.1	1	0.1-12.4K	8.71	23.81	1.067	MIL Type RWR74S
	ESW-5	5	0.1	1	0.1-12.4K	8.71	23.81	1.067	MIL Type RWR74W
	ESN-5	5	0.1	1	0.1-6.04K	8.71	23.81	1.067	MIL Type RWR74N
ESN-5-10	5	0.1	1	0.1-6.04K	8.71	23.81	1.067	MIL Type RWR74Z	
EGS-10-80	7	0.1	1	0.1-12.4K	8.71	23.81	1.067	MIL Type RWR84S	
EGW-10	7	0.1	1	0.1-12.4K	8.71	23.81	1.067	MIL Type RWR84W	
EGN-10-80	7	0.1	1	0.1-6.19K	8.71	23.81	1.067	MIL Type RWR84N	
EGN-10-10	7	0.1	1	0.1-6.19K	8.71	23.81	1.067	MIL Type RWR84Z	
ESS-10	10	0.1	1	0.1-39.2K	10.31	46.79	1.067	MIL Type RWR78S	
ESW-10	10	0.1	1	0.1-39.2K	10.31	46.79	1.067	MIL Type RWR78W	
ESN-10	10	0.1	1	0.1-19.6K	10.31	46.79	1.067	MIL Type RWR78N	
ESN-10-10	10	0.1	1	0.1-19.6K	10.31	46.79	1.067	MIL Type RWR78Z	
Established Reliability Wirewound Resistors Aluminum Housed ENH Style are Non-Inductive MIL-PRF-39009 (tolerance 1% only)	ENH-5	5	1	1	1-1.65K	See detailed specification sheet			MIL Type RER40
	ENH-10	10	1	1	1-2.8K				MIL Type RER45
	ENH-25	20	1	1	1-6.04K				MIL Type RER50
	ENH-50	30	1	1	1-4.99K				MIL Type RER55
	ERH-5	5	1	1	0.1-3.32K				MIL Type RER60
	ERH-10	10	1	1	0.1-5.62K				MIL Type RER65
	ERH-25	20	1	1	0.1-12.1K				MIL Type RER70
	ERH-50	30	1	1	0.1-39.2K				MIL Type RER75
Wirewound Resistors Aluminum Housed Chassis Mount RH Style : Standard Winding NH Style : Non-Inductive Winding MIL-PRF-18546	RH-5	7.5	0.05	5	0.01-24.5K	See detailed specification sheet			MIL TYPE RE60G
	NH-5	7.5	0.05	5	0.05-12.75K				MIL TYPE RE60N
	RH-10	12.5	0.05	5	0.01-47.1K				MIL TYPE RE65G
	NH-10	12.5	0.05	5	0.05-23.5K				MIL TYPE RE65N
	RH-25	25	0.05	5	0.01-95.2K				MIL Type RE70G
	NH-25	25	0.05	5	0.05-47.6K				MIL Type RE70N
	RH-50	50	0.05	5	0.01-273K				MIL Type RE75G
	NH-50	50	0.05	5	0.05-136K				MIL Type RE75N
	RH-100	100	0.05	5	0.05-90K				MIL Type RE77G
	NH-100	100	0.05	5	0.05-37.5K				MIL Type RE77N
	RH-250	250	0.05	5	0.05-116K				MIL Type RE80G
	NH-250	250	0.05	5	0.05-48.5K				MIL Type RE80N

Power Wirewound Resistors

Vishay



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C	TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS	
			MIN.	MAX.		BODY Ø	BODY LENGTH	LEAD Ø		
Precision Power Wirewound Resistors MIL-PRF-26 Silicone Coated	G-1-80	1	0.05	5	0.1-3.4K	2.67	7.14	0.559	MIL Type RW81	
	G-1-380	1	0.1	5	0.1-1K	2.67	7.14	0.559		
	G-2	1.5	0.05	5	0.1-4.9K	2.39	8.33	0.559		
		G-3-80	2	0.05	5	0.1-10.4K	3.18	11.10	0.559	MIL Type RW80
		G-3-380	2	0.1	5	0.1-2.74K	3.18	11.10	0.559	
		G-5	5	0.05	5	0.1-24.5K	5.59	16.26	0.864	
		G-5C	7	0.05	5	0.1-32.3K	6.35	15.06	1.067	
	G-10	10	0.05	5	0.1-95.2K	8.73	25.40	1.067		
Precision Power Wirewound Resistors MIL-PRF-26 Qualified Type RW Silicone Coated with axial leads Non Inductive Style NS available	RS-1 / 8	0.125	0.5	5	0.1-950	2.03	4.32	0.559	MIL Type RW70	
	RS-1 / 4	0.4	0.05	5	0.1-3.4K	2.67	7.14	0.559		
	RS-1 / 2	0.75	0.05	5	0.1-4.9K	2.39	8.31	0.559		
	RS-1A	1	0.05	5	0.1-10.4K	3.17	11.10	0.559		
	RS-1A-300	1	0.1	5	0.1-2.74K	3.17	11.10	0.559		
	RS-1M	1	0.05	5	0.1-6.85K	3.17	7.90	0.559	MIL Type RW79	
	RS-2	5.5	0.05	5	0.1-47.1K	7.14	19.43	1.067		
	RS-2M	3	0.05	5	0.1-18.74K	5.08	7.90	1.067		
	RS-2B	3.75	0.05	5	0.1-24.5K	5.54	15.80	1.067	MIL Type RW79	
	RS-2B-300	3	0.1	5	0.1-6.49K	5.54	15.80	1.067		
	RS-2C	3.25	0.05	5	0.1-32.3K	6.33	15.06	1.067	MIL Type RW69	
	RS-2C-17	3.25	0.05	5	0.1-32.3K	6.33	15.06	1.067		
	RS-2C-23	3.25	0.5	5	0.1-2K	6.33	15.06	1.067	MIL Type RW74	
	RS-5	6.5	0.05	5	0.1-95.2K	8.71	25.40	1.067		
	RS-5-69	5	0.1	5	0.1-24.3K	8.71	23.80	1.067	MIL Type RW67	
	RS-5-70	6.5	0.5	5	0.1-8.2K	8.71	25.40	1.067		
	RS-7	9	0.05	5	0.1-154K	8.71	32.51	1.067	MIL Type RW78	
RS-10	13	0.05	5	0.1-273K	10.32	47.50	1.067			
RS-10-38	10	0.1	5	0.1-71.5K	10.32	46.74	1.067	MIL Type RW68		
RS-10-39	13	0.5	5	0.1-20K	10.32	47.50	1.067			
Low Value Resistors Precision Power Molded with Axial leads MIL-PRF-49465 Type RLV	LVR-1	1	1	10	0.01-0.1	3.18	11.10	0.559	MIL Type RLV30	
	LVR-3	3	1	10	0.005-0.2	5.46	14.48	0.864		
	LVR-5	5	1	10	0.005-0.3	8.64	23.75	1.067	MIL Type RLV31	
	LVR-10	10	1	10	0.01-0.8	10.21	46.69	1.067		
Low Value Resistor Open Air Design Radial Leads	SR5	5	1	5	0.004-0.05	N/A	21.34	1.071	Welded Construction	
Commercial Power Resistors Axial Leads with High Temperature Silicone Coating	CW-1 / 2	0.5	3	10	0.1-1.77K	2.67	7.14	0.559	Complete Welded Construction High Power/ Size Ratio	
	CW-1	1	3	10	0.1-6.37K	3.18	11.10	0.559		
	CW-1M	1	3	10	0.1-3.3K	3.18	7.90	0.559		
	CW-2M	3.75	3	10	0.1-12K	5.08	14.27	0.864		
	CW-2B	3.75	3	10	0.1-15K	5.588	15.80	0.864		
	CW-2	5.5	3	10	0.1-28.7K	7.163	19.43	1.067		
	CW-2B-13	6.0	3	10	0.1-6.8K	5.588	14.30	0.864		
	CW-2C	3.25	3	10	0.1-19.9K	6.350	15.06	1.067		
	CW-2C-14	3.25	3	10	0.1-19.9K	6.350	15.06	0.864		
	CW-5	6.5	3	10	0.1-58.5K	8.738	25.40	1.067		
	CW-5-2	5	3	10	0.1-40.3K	7.163	25.40	0.864		
	CW-5-3	6.5	3	10	0.1-58.5K	8.738	25.40	0.864		
	CW-7	9	3	10	0.1-95.2K	8.738	32.54	1.067		
	CW-10	13	3	10	0.1-167K	10.338	47.62	1.067		
CW-10-3	13	3	10	0.1-167K	10.338	47.62	0.864			



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C		TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS
		MIN.	MAX.	BODY Ø	BODY LENGTH		LEAD Ø			
Commercial Power Wirewound Resistors	CA-1	1	5	10	0.1-1K	4.32	12.52	0.838	Coated with a special grade silicone for additional environmental protection	
	CA-2	2	5	10	0.1-2.4K	4.32	16.84	0.838		
Commercial Power Wirewound Resistors Axial Leads Low Cost / High Performance	CA-4050	2	5	10	0.1-170	4.35	15.87	0.838	CA-5000 models have special silicone coating for corrosion and abrasion protection	
	CA-4055	2.2	5	10	0.1-195	4.35	17.14	0.838		
	CA-4060	2.4	5	10	0.1-220	4.35	18.41	0.838		
	CA-4070	2.8	5	10	0.1-270	4.35	20.95	0.838		
	CA-4080	3.2	5	10	0.1-320	4.35	23.49	0.838		
	CA-4090	3.6	5	10	0.1-370	4.35	26.03	0.838		
	CA-4100	4	5	10	0.15-420	4.35	28.57	0.838		
	CA-4150	6	5	10	0.2-630	4.35	41.27	0.838		
	CA-4200	8	5	10	0.2-920	4.35	53.97	0.838		
	CA-4220	8.8	5	10	0.2-1.02K	4.35	59.05	0.838		
	CA-5050	2.5	5	10	0.1-2.7K	4.86	16.67	0.940		
	CA-5055	2.75	5	10	0.1-3.1K	4.86	17.94	0.940		
	CA-5060	3	5	10	0.1-3.5K	4.86	19.21	0.940		
	CA-5070	3.5	5	10	0.1-4.3K	4.86	21.75	0.940		
	CA-5080	4	5	10	0.1-5.1K	4.86	24.29	0.940		
	CA-5090	4.5	5	10	0.1-5.9K	4.86	26.83	0.940		
	CA-5100	5	5	10	0.15-6.7K	4.86	29.37	0.940		
	CA-5150	7.5	5	10	0.2-7K	4.86	42.07	0.940		
CA-5200	10	5	10	0.2-7K	4.86	54.77	0.940			
CA-5220	11	5	10	0.2-7K	4.86	59.85	0.940			
PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C		TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS NOM. (mm)		SPECIAL CHARACTERISTICS	
MIN.	MAX.	MOUNTING CENTERS	BODY Ø							
Commercial Power Wirewound Resistors Lug Tab type Leads Low Cost / High Performance	CL-4095	3.8	5	10	0.10-685	24.13	0.105			
	CL-4100	4	5	10	0.11-740	25.40	0.105			
	CL-4125	5	5	10	0.15-1.02K	31.75	0.105			
	CL-4150	6	5	10	0.19-1.35K	38.10	0.105			
	CL-4200	8	5	10	0.27-1.86K	50.80	0.105			
	CL-4225	9	5	10	0.31-2.14K	57.15	0.105			
	CL-4300	12	5	10	0.43-2.99K	76.20	0.105			
	CL-6095	5.7	5	10	0.10-175	24.13	0.170			
	CL-6100	6	5	10	0.10-190	25.40	0.170			
	CL-6133	8	5	10	0.13-285	33.78	0.170			
	CL-6167	10	5	10	0.18-380	42.42	0.170			
	CL-6200	12	5	10	0.22-475	50.80	0.170			
	CL-6233	14	5	10	0.27-570	59.18	0.170			
	CL-6300	18	5	10	0.35-765	76.20	0.170			
Commercial Power Wirewound Resistors Through-hole Tab type Leads Low Cost / High Performance	PCT-4050	2.0	5	10	0.10-390	12.70	0.105			
	PCT-4065	2.6	5	10	0.14-560	16.51	0.105			
	PCT-4085	3.4	5	10	0.20-785	21.59	0.105			
	PCT-4105	4.2	5	10	0.25-1.01K	26.67	0.105			
	PCT-4145	5.8	5	10	0.36-1.46K	36.83	0.105			
	PCT-4185	7.4	5	10	0.47-1.91K	46.99	0.105			
PCT-4215	8.6	5	10	0.56-2.25K	54.61	0.105				

Power Wirewound Resistors

Vishay



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C		TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)				SPECIAL CHARACTERISTICS
		MIN.	MAX.	MIN.	MAX.		WIDTH	BODY LENGTH	HEIGHT	LEAD Ø	
Ceramic Cased Wirewound / Metal Oxide Resistors Axial Leads Wirewound is fiberglass core, fireproof inorganic crimped construction Meets or exceeds EIA RS-344 Requirements	CP-2	2	5	10		0.1-1K 100-12K	7.14	18.26	7.14	0.838	Wirewound Metal Oxide
	CP-2-3	2	5	10		0.1-1K 100-12K	7.14	18.26	8.71	0.838	Wirewound Metal Oxide
	CP-3	3	5	10		0.1-2K 150-22K	8.71	23.01	8.71	0.940 0.838	Wirewound Metal Oxide
	CP-3-3	3	5	10		0.1-2K 150-22K	8.71	23.01	10.31	0.940 0.838	Wirewound Metal Oxide
	CP-5	5	5	10		0.1-2.4K 150-27K	10.31	23.01	9.52	0.940 0.838	Wirewound Metal Oxide
	CP-5-3	5	5	10		0.1-2.4K 150-27K	10.31	23.01	11.10	0.940 0.838	Wirewound Metal Oxide
	CP-7	7	5	10		0.1-5K 1K-35K	10.31	36.12	9.52	0.940 0.838	Wirewound Metal Oxide
	CP-7-3	7	5	10		0.1-5K 1K-35K	10.31	36.12	12.70	0.940 0.838	Wirewound Metal Oxide
	CP-10	10	5	10		0.1-7K 1K-40K	10.31	48.41	9.52	0.940 0.838	Wirewound Metal Oxide
	CP-10-3	10	5	10		0.1-7K 1K-40K	10.31	48.41	12.70	0.940 0.838	Wirewound Metal Oxide
	CP-15	15	5	10		0.1-8K 1K-40K	13.49	48.41	13.49	0.940 0.838	Wirewound Metal Oxide
	CP-15-3	15	5	10		0.1-8K 1K-40K	13.49	48.41	16.66	0.940 0.838	Wirewound Metal Oxide
	CP-20	20	5	10		0.1-10K 1K-45K	13.49	64.29	13.49	0.940 0.838	Wirewound Metal Oxide
	CP-20-3	20	5	10		0.1-10K	13.49	64.29	16.66	0.940	Wirewound
	CP-22	22	5	10		0.1-10K	13.49	64.29	13.49	0.940	Wirewound
	CP-22-3	22	5	10		0.1-10K	13.49	64.29	16.66	0.940	Wirewound
	CP-25	25	5	10		0.1-10K	16.66	64.29	16.66	1.041	Wirewound
	CP-15B	15	5	10		0.1-288					Wirewound
	CP-20B	20	5	10		0.1-460					Wirewound
	CP-26B	25	5	10		0.12-570					Wirewound
CP-26SM	25	5	10		0.12-570	See Detailed CP Quick Connect Specification Sheet				Wirewound	
CP-30SM	30	5	10		0.32-623					Wirewound	
CP-50B	50	5	10		0.16-740					Wirewound	
CP-50B-1	50	5	10		0.16-740					Wirewound	
Ceramic Cased Wirewound Resistors Axial leads, Low ohmic values Completely welded fireproof, inorganic construction	CPL-3	3	5	10		0.1-0.10	8.71	23.01	8.71	0.940	
	CPL-3-3	3	5	10		0.1-0.10	8.71	23.01	10.31	0.940	
	CPL-5	5	5	10		0.1-0.10	10.31	23.01	9.52	0.940	
	CPL-5-3	5	5	10		0.1-0.10	10.31	23.01	11.10	0.940	
	CPL-7	7	5	10		0.1-0.10	10.31	36.12	9.52	0.940	
	CPL-7-3	7	5	10		0.1-0.10	10.31	36.12	12.70	0.940	
	CPL-10	10	5	10		0.1-0.10	10.31	48.41	9.52	0.940	
	CPL-10-3	10	5	10		0.1-0.10	10.31	48.41	12.70	0.940	
	CPL-15	15	5	10		0.1-0.10	13.49	48.41	13.49	0.940	
CPL-15-3	15	5	10		0.1-0.10	13.49	48.41	16.66	0.940		
Ceramic Cased Wirewound Resistors Vertical Mounting CPCL : Nickel Chrome , Alloy Element , Completely Welded. CPCC : Woven Fibre Core. CPCP : Ceramic Core , Completely Welded. CPCF : Metal Film Element , Ceramic Core.	CPCL-2	2	3	10		0.01-0.10	8.69	11.71	22.28	0.940	Vertical Mount can be directly mounted on P.C.B.
	CPCC-2	2	5	10		0.1-500	8.69	11.71	22.28	0.940	
	CPCP-2	2	1	5		0.1-4K	8.69	11.71	22.28	0.940	
	CPCF-2	2	1	10		501-150K	8.69	11.71	22.28	0.940	
	CPCL-3	3	3	10		0.01-0.10	9.45	12.73	26.77	0.940	Fireproof Inorganic Construction Meets or exceeds requirements of EIA standard RS-344
	CPCC-3	3	5	10		0.1-800	9.45	12.73	26.77	0.940	
	CPCP-3	3	1	5		0.1-5K	9.45	12.73	26.77	0.940	
	CPCF-3	3	1	10		801-150K	9.45	12.73	26.77	0.940	
	CPCL-5	5	3	10		0.01-0.10	10.57	13.79	27.25	0.940	
	CPCC-5	5	5	10		0.1-800	10.57	13.79	27.25	0.940	
	CPCP-5	5	1	5		0.1-5K	10.57	13.79	27.25	0.940	
	CPCF-5	5	1	10		801-150K	10.57	13.79	27.25	0.940	
	CPCL-10	10	3	10		0.01-0.10	14.78	16.79	38.61	1.143	
	CPCP-10	10	1	5		0.1-8K	14.78	16.79	38.61	1.143	
CPCC-10	10	5	10		0.1-1.5K	14.78	16.79	38.61	1.041		



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C		TOLERANCE ± %		RESISTANCE RANGE	DIMENSIONS MAX. (mm)				SPECIAL CHARACTERISTICS
		MIN.	MAX.	Ω	WIDTH	BODY LENGTH	HEIGHT	LEAD Ø			
Ceramic Cased Wirewound Resistors 4-Leads for Current Sensing <small>Fireproof, inorganic welded construction</small>	CPSL-3-5	3	3	10	0.01-0.10	8.73	23.02	8.73	0.940	Extremely low resistance values	
	CPSL-3-3	3	3	10	0.01-0.10	8.73	23.02	10.32	0.940		
	CPSL-5-5	5	3	10	0.01-0.10	10.32	23.02	9.52	0.940		
	CPSL-5-3	5	3	10	0.01-0.10	9.52	23.02	11.91	0.940		
	CPSL-7-5	7	3	10	0.01-0.10	10.32	36.12	9.52	0.940		
	CPSL-10-5	10	3	10	0.01-0.10	10.32	48.42	9.52	0.940		
	CPSL-15-5	15	3	10	0.01-0.10	13.49	48.42	13.49	0.940		
Ceramic Cased Wirewound Resistors <small>Radial Leads. Fiberglass core, fireproof, inorganic crimped construction</small>	CPR-3	3	5	10	0.1-1K	10.52	24.03	10.52	1.603	Circuit board lock-in mounting tabs	
	CPR-5	5	5	10	0.1-1K	10.52	27.94	10.52	1.603		
	CPR-7	7	5	10	0.1-1.429K	10.52	36.53	10.52	1.603		
	CPR-10	10	5	10	0.1-2K	10.52	48.97	10.52	1.603		
	CPR-15	15	5	10	0.1-2K	13.51	48.97	13.51	2.893		
	CPR-20	20	5	10	0.15-2.855K	13.51	64.47	13.51	2.893		
Silicone Coated Wirewound Resistors <small>Radial Leads. Fiberglass core, crimped construction</small>	CPS4	4	5	10	0.1-1.0K	8.37	25.4	8.37	1.52		
	CPS5	5	5	10	0.1-2.0K	8.37	35.7	8.37	1.52		
	CPS7	6.5	5	10	0.1-2.7K	8.37	45.9	8.37	1.52		
Ceramic Cased Wirewound Resistors <small>Axial Leads. Ceramic Core, fireproof inorganic welded construction. High Surge capabilities</small>	CPW-2	2	1	5	0.1-7K	7.14	18.26	7.14	0.838	Non-Inductive Style available designated CPWN	
	CPW-2-3	2	1	5	0.1-7K	7.14	18.26	8.71	0.838		
	CPW-3	3	1	5	0.1-7.5K	8.71	23.01	8.71	0.838		
	CPW-3-3	3	1	5	0.1-7.5K	8.71	23.01	10.31	0.838		
	CPW-5	5	1	5	0.1-8.5K	10.31	23.01	9.52	0.838		
	CPW-5-3	5	1	5	0.1-8.5K	10.31	23.01	11.10	0.838		
	CPW-7	7	1	5	0.1-18K	10.31	36.12	9.52	0.838		
	CPW-7-3	7	1	5	0.1-18K	10.31	36.12	12.70	0.838		
	CPW-10	10	1	5	0.12-30K	10.31	48.41	9.52	0.838		
	CPW-10-3	10	1	5	0.12-30K	10.31	48.41	12.70	0.838		
	CPW-15	15	1	5	0.12-30K	13.49	48.41	13.49	0.838		
	CPW-15-3	15	1	5	0.12-30K	13.49	48.41	16.66	0.838		
	CPW-20	20	1	5	0.18-45K	13.49	64.29	13.49	0.838		
	CPW-20-3	20	1	5	0.18-45K	13.49	64.29	16.66	0.838		
PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C		TOLERANCE ± %		RESISTANCE RANGE	DIMENSIONS MAX. (mm)		SPECIAL CHARACTERISTICS		
		MIN.	MAX.	Ω	BODY Ø	HEIGHT					
Tubular Industrial Power Wirewound Resistors <small>Non Inductive Style NHLW Available</small>	HLW-3	3	5	10	0.1-6K	7.54	12.70	Lead attached for direct electrical connection by soldering			
	HLW-5	5.25	5	10	0.1-15K	8.73	17.47				
	HLW-6	8	5	10	0.1-25K	10.32	26.99				
	HLW-12	12	5	10	0.1-70K	10.32	46.04				
	HLW-15	15	5	10	0.1-58K	14.29	39.69				
	HLW-20	20	5	10	0.1-120K	14.29	52.39				
Tubular Industrial Power Wirewound Resistors <small>Non Inductive Style NHL Available</small>	HL-11	11	5	10	0.1-70K	11.91	46.04	Special high temperature silicone coating Various Terminal configurations			
	HL-12	12	5	10	0.1-58K	10.32	46.04				
	HL-15	15	5	10	0.1-60K	14.29	39.69				
	HL-20	20	5	10	0.1-95K	14.29	52.39				
	HL-25	25	5	10	0.1-115K	17.46	52.39				
	HL-26	26	5	10	0.1-170K	14.29	77.79				
	HL-50	50	5	10	0.1-112K	17.46	103.19				
HL-51	51	5	10	0.1-124K	23.02	90.49					

Power Wirewound Resistors

Vishay



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C	TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS
			MIN.	MAX.		BODY Ø	BODY LENGTH	LEAD Ø	
Tubular Industrial Power Wirewound Resistors (Cont'd) <small>Non Inductive Style NHL Available</small>	HL-60	60	5	10	0.1-145K	23.02	103.19		Special high temperature silicone coating Various Terminal configurations
	HL-65	65	5	10	0.1-170K	23.02	115.89		
	HL-80	80	5	10	0.1-190K	33.34	103.19		
	HL-100	100	5	10	0.1-260K	23.02	166.69		
	HL-120	120	5	10	0.1-330K	33.34	153.99		
	HL-130	130	5	10	0.1-380K	33.34	166.69		
	HL-160	160	5	10	0.1-470K	33.34	204.79		
	HL-175	175	5	10	0.1-500K	33.34	217.49		
HL-225	225	5	10	0.1-645K	33.34	268.29			
Flat Industrial Power Wirewound Resistors <small>Non Inductive Style NHLM & NHL Available</small>	HLM-10	10	5	10	0.1-15K				Self Stacking for Horizontal or Vertical placement
	HLM-15	15	5	10	0.1-26K				
	HLM-20	20	5	10	0.1-71K				
	HL-24	30	5	10	0.1-11K			See detailed specification sheet	
	HL-35	40	5	10	0.1-26K				
	HL-55	55	5	10	0.1-54K				
	HL-70	70	5	10	0.1-77K				
HL-95	95	5	10	0.1-99.9K					
Adjustable Industrial Power Wirewound Resistors <small>Tubular and Flat HLT Tapped Version Available</small>	HLA-12	12	5	5	1.0-10K	10.32	46.04		Adjustable resistor or voltage divider Also Model HLT which provides fixed taps for voltage dividers
	HLA-15	15	5	5	1.0-12K	14.29	39.69		
	HLA-20	20	5	5	1.0-18K	14.29	52.39		
	HLA-25	25	5	5	1.0-23K	17.46	52.39		
	HLA-26	26	5	5	1.0-31K	14.29	77.79		
	HLA-50	50	5	5	1.0-57K	17.46	103.19		
	HLA-51	51	5	5	1.0-95K	23.02	90.49		
	HLA-60	60	5	5	1.0-74K	23.02	103.19		
	HLA-65	65	5	5	1.0-130K	23.02	115.89		
	HLA-80	80	5	5	1.0-111K	33.34	103.19		
	HLA-100	100	5	5	1.0-132K	23.02	166.69		
	HLA-120	120	5	5	1.0-180K	33.34	153.99		
	HLA-130	130	5	5	1.0-192K	33.34	166.69		
	HLA-160	160	5	5	1.0-249K	33.34	204.79		
HLA-175	175	5	5	1.0-398K	33.34	217.49			
HLA-225	225	5	5	1.0-337K	33.34	268.29			
Tubular, Edgewound Industrial Power Wirewound Resistors	HLZ-33	35	5	10	0.05-1.9	14.29	52.39		Ribbon Edgewound Element
	HLZ-90	90	5	10	0.10-5.7	14.29	103.19		
	HLZ-99	100	5	10	0.15-6.1	19.05	90.49		
	HLZ-105	105	5	10	0.20-7.4	19.05	103.19		
	HLZ-110	110	5	10	0.20-8.6	19.05	115.89		
	HLZ-140	140	5	10	0.08-9.0	28.58	103.19		
	HLZ-165	165	5	10	0.35-13.0	19.05	166.69		
	HLZ-220	220	5	10	0.10-16.0	28.58	153.99		
	HLZ-240	240	5	10	0.10-18.0	28.58	166.69		
	HLZ-275	275	5	10	0.15-23.0	28.58	204.79		
	HLZ-300	300	5	10	0.15-25.0	28.58	217.49		
HLZ-375	375	5	10	0.20-32.0	28.58	268.29			
Wirewound Shunt Resistors <small>4-Terminal Low ohmic values, High Precision</small>	SPU-50	1	0.1	5	0.001-0.060	8.18	17.02	1.067	
	SPU-51	2	0.1	5	0.001-0.060	9.78	20.32	1.067	
	SPU-52	4	0.1	5	0.001-0.200	9.78	25.65	1.067	
	SPU-53	5	0.1	5	0.01-0.50	11.35	47.75	1.067	
	SPU-104	1.875	0.1	5	0.0025-0.0100				
	SPU-111-1	1	0.1	5	0.005			See detailed specification sheet	
	SPU-114	1	0.1	5	0.00167-0.0200				
Special Purpose Wirewound Resistors	SPR-2213	70	5	10	0.5-24K				Other SPR special wirewound resistors are available, contact the factory.
	SPR-2214	100	5	10	1.0-44K			See detailed specification sheet	



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C		TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS
		MIN.	MAX.	BODY Ø	BODY LENGTH		LEAD Ø			
Vitreous Power Wirewound Resistors Watts at 25°C 5% Tolerance is standard 1% or 10% on request	RWM 4x10	3	1	10	0.1-10K	6.50	13.0	0.8	CECC/RB59 / JB / RW69	
	RWM 4x22	5	1	10	0.1-16K	6.50	23.10	0.8	CECC/RB61 / HB	
	RWM 5x26	7	1	10	0.1-27K	8.95	25.70	0.8	CECC/RB57 / RW67	
	RWM 6x22	7	1	10	0.1-39K	7.50	19.00	0.8	CECC/RB57 / KB	
	RWM 8x26	8	1	10	0.1-27K	8.90	25.70	0.8	RB60	
	RWM 6x34	8	1	10	0.33-36K	8.90	34.70	0.8	CECC / RB60	
	RWM 8x34	11	1	10	0.33-36K	8.90	34.70	0.8	RB58	
	RWM 8x45	11	1	10	0.47-62K	10.90	46.80	0.8	CECC / RB58 / RW68	
	RWM 10x45	25	1	10	0.47-62K	10.90	46.80	0.8		
	RWM 10x64	25	1	10	0.68-100K	10.90	64.80	0.8		
RWM 10x65	30	1	10	0.68-100K	10.90	64.80	0.8			
Vitreous Power Wirewound Resistors with external collar Watts at 25°C	RW 8x34	13		5	1-10K	11.50	36.00		Tubular style High Dissipation/ Power Outstanding Endurance Non-Inductive style available	
	RW 10x50	20		5	1-27K	13.00	52.00			
	RW 13x70	32		5	2.2-56K	16.00	72.00			
	RW 16x94	50		5	2.2-56K	19.50	96.00			
RW 20x17	80		5	2.7-68K	23.00	118.00				
Vitreous Power Wirewound Resistors for traction applications Watts at 25°C	RWST 25x138	110		5	2.7-82K	28.00	138.00		Extremely rugged construction. Can withstand repeated overloads in electrical traction applications.	
	RWST 25x168	180		5	2.7-100K	28.00	168.00			
	RWST 30x250	320		5	4.7-220K	33.00	250.00			
	RWST 40x370	600		5	8.2-360K	45.00	370.00			
RWST 50x373	800		5	12-430K	53.00	373.00				
Vitreous Power Adjustable Wirewound Resistors Watts at 25°C	RA 13x70	21		5	33-3K9	16.00	70.00		Ceramic Tubular Core ensures high dissipation capacity and excellent resistance to thermal shock and overload.	
	RA 16x94	35		5	68-3K9	19.50	94.00			
	RA 20x117	50		5	100-4K7	23.00	117.00			
	RA 25x138	75		5	150-6K8	28.00	138.00			
	RA 25x168	120		5	220-10K	28.00	168.00			
RA 30x250	180		5	330-22K	33.00	250.00				
Semi-Vitreous Power Tubular Wirewound Resistors Watts at 25°C	RSSD 8x34	16	5	20	0.12-10	10.00	34.00		Low Ohmic Values Medium and High Power Resistors able to withstand heavy transient and severe shock and vibration conditions. Can be tapped by means of adjustable collars. Standard model has single adjustable collar.	
	RSSD 10X50	25	5	20	0.12-22	11.50	50.00			
	RSSD 13x70	42	5	20	0.12-43	14.50	70.00			
	RSSD 16x94	70	5	20	0.33-75	18.00	94.00			
	RSSD 20x117	100	5	20	0.22-100	22.00	117.00			
	RSSD 25x138	140	5	20	0.1-150	27.00	138.00			
	RSSD 25x168	200	5	20	0.12-220	27.00	168.00			
	RSSD 30x250	280	5	20	0.22-360	32.00	250.00			
	RSSD 40x370	450	5	20	0.47-470	43.00	370.00			
RSSD 50x373	600	5	20	0.68-560	53.00	373.00				
Power Vitreous Wirewound Resistors with corrugated ribbon element	RSO 25x138	160	5	10	0.068-12	39.00	138.00		Original winding method using corrugated edge-wound tape gives very high dissipation.	
	RSO 25x168	200	5	10	0.1-18	39.00	168.00			
	RSO 30x250	350	5	10	0.22-33	44.00	250.00			
	RSO 40x370	700	5	10	0.33-56	54.50	370.00			
	RSO 50x373	1000	5	10	0.39-68	65.00	373.00			
Vitreous Enamelled Wirewound Resistors	VC1	2.5	1	10	0.1-10K	5.60	12.70	0.80	CECC40201-002-JB	
	VC2	6	1	10	0.1-22K	8.00	22.20	0.80	CECC40201-002-KB	

Power Wirewound Resistors

Vishay



PRODUCT DESCRIPTION	TYPE	WATTS		TOLERANCE	RESISTANCE	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS
		AT 25°C	± %	RANGE	BODY Ø	BODY LENGTH	LEAD Ø		
		MIN.	MAX.	Ω					
Axial Vitreous Wirewound Resistors Power Rating at 40°C Body Diameter is 1mm larger for Values ≤ 10Ω	G202-0414	4.00	2	10	0.1-10K	5.70	13.0	0.8	CECC 40201-002 Style JB CECC 40201-002 Style KB
	G204-0719	7.00	2	10	0.1-39K	8.50	19.3	0.8	
	G206-0933	13.0	2	10	0.15-68K	9.80	32.3	0.8	
	G207-0947	17.0	2	10	0.2-120K	10.50	49.3	0.8	
Axial Cemented Wirewound Resistors Power Rating at 40°C Body Diameter is 1mm larger for Values ≤ 10Ω	AC01	1	5		0.1-2.4K	4.3	10	0.8	Hard Fired Porcelain body
	AC03	3	5		0.1-5.1K	5.5	13	0.8	
	AC04	4	5		0.1-6.8K	5.7	17	0.8	
	AC05	5	5		0.1-10K	7.5	17	0.8	
	AC07	7	5		0.1-15K	7.5	25	0.8	
	AC10	10	5		0.68-27K	8.0	44	0.8	
	PAC01	1	1		0.1-2.2	4.3	10	0.8	
	PAC02	2	1		0.1-3.6K	5.5	13	0.8	
	PAC03	3	1		0.1-4.7K	5.5	13	0.8	
	PAC04	4	1		0.1-8.2K	5.7	17	0.8	
	PAC05	5	1		0.68-10K	7.5	17	0.8	
	PAC06	6	1		0.68-12K	7.5	25	0.8	
	Z301-0309	1.00	1	10	0.3-2K	3.00	8.5	0.7	
	ZDA-0411	2.00	1	10	0.47-4.3K	3.8-0.4	10.5-0.6	0.7	
	Z302-0414	3.00	1	10	0.1-3.3K	4.80	13.0	0.8	
	Z303-0617	4.00	1	10	0.1-3.9K	5.50	15.8	0.8	
Z305-0922	6.00	1	10	0.1-10K	8.70	22.3	0.8		
Z306-0933	8.00	1	10	0.1-16K	8.70	32.3	0.8		
Z307-0947	10.0	1	10	0.2-30K	9.00	49.8	0.8		
Axial Cemented Wirewound Resistors SG Power Rating at 40°C	SG 3	3.00	1	10	0.1-3.3K	4.80	13.0	0.8	
	SG 4	4.00	1	10	0.1-3.9K	5.50	15.8	0.8	
Wirewound Resistors in Ceramic Case Power Rating at 70°C	KKA 4	4.00	5	10	0.022-9.1K	6.4x6.4	20.0	0.8	Horizontal Mounting
	KKA 5	5.00	5	10	0.1-15K	6.4x6.4	25.0	0.8	
	KKA 7	7.00	5	10	0.1-15K	6.4x6.4	38.0	0.8	
	KKA 9	9.00	5	10	0.062-13K	9.0x9.0	38.0	0.8	
	KKA 11	11.0	5	10	0.15-20K	9.0x9.0	50.0	0.8	
	KKA 17	17.0	5	10	0.27-33K	9.0x9.0	75.0	0.8	



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C		TOLERANCE ± %		RESISTANCE RANGE	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS
		MIN.	MAX.	Ω	BODY Ø	BODY LENGTH	LEAD Ø			
Wirewound Resistors in Ceramic Case	KKE 4	4.00	5	20	0.022-9.1K	7.0x8.0	20.0	0.8	Single ended lead wire Construction for Vertical Mounting	
	KKE 7	7.00	5	20	0.1-15K	9.0x10.5	25.0	0.8		
	KKE 9	9.00	5	10	0.062-13K	9.0x10.5	38.0	0.8		
	KKE 11	11.0	5	10	0.15-20K	9.0x10.5	50.0	0.8		
	KKE 17	17.0	5	10	0.27-33K	9.0x10.5	75.0	0.8		
Wirewound Fusible Resistors in Ceramic Case Power Rating at 25 °C	KKE 7Si	4.00	5	10	0.022-9K1	9.0x10.5	25.0	0.8	Vertical Mounting	
	KKE 9Si	5.50	5	10	0.062-13K	9.0x10.5	38.0	0.8		
	KKE 11Si	7.00	5	10	0.15-20K	9.0x10.5	50.0	0.8		
	KKE 17Si	10.0	5	10	0.27-33K	9.0x10.5	75.0	0.8		
Vitreous Wirewound Resistors with Lugs Power Rating at 40°C Also Available: GWS...E Adjustable Model GWS...ni Non-inductive Model According to MIL-R-26	GWS 15	15.0	2	10	4.3-20K	8.00	46.5	Tubular Resistors with Various Terminations Available		
	GWS 20	20.0	2	10	3.6-30K	10.00	51.5			
	GWS 25	25.0	2	10	3.6-39K	12.60	56.5			
	GWS 35	30.0	2	10	5.1-47K	12.60	64.0			
	GWS 50	40.0	2	10	3.3-62K	15.60	64.0			
	GWS 75	65.0	2	10	7.5-130K	15.60	102.0			
	GWS100	80.0	2	10	6.8-110K	23.60	102.0			
	GWS 220	160	2	10	13-160K	23.60	167.0			
	GWS 300	300	2	10	24-300K	23.60	269.0			
	GWS 500	500	2	10	39-270K	34.00	335.0			
	GWS 30 / 100	150	2	10	9.1-100K	34.00	102.5			
GWS 30 / 133	200	2	10	13-160K	34.00	136.0				
Vitreous Wirewound Resistors Power Rating at 40°C According to MIL-R-26 Also Available : RW...E Adjustable Model RW...ni Non-inductive Model	RW 10 / 44	18.0	5	10	1-36K	15.70	44.4	Available with corrugated ribbon Tubular style with radial lugs for mounting Rugged construction to withstand mechanical and environmental stresses.		
	RW 12 / 25	11.0	5	10	0.39-13K	18.10	25.4			
	RW 12 / 38	15.0	5	10	1-33K	18.10	38.1			
	RW 12 / 51	25.0	5	10	1-56K	18.10	50.8			
	RW 12 / 76	45.0	5	10	2-91K	18.10	76.2			
	RW 20 / 76	70.0	5	10	1-75K	26.00	76.2			
	RW 20 / 102	90.0	5	10	3-110K	26.00	101.6			
	RW 30 / 102	130	5	10	2.7-160K	36.30	101.6			
RW 30 / 152	220	5	10	4.7-200K	36.30	152.4				

Power Wirewound Resistors

Vishay



PRODUCT DESCRIPTION	TYPE	WATTS AT 25°C	TOLERANCE ± %		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS
			MIN.	MAX.		BODY Ø	BODY LENGTH	LEAD Ø	
Vitreous Wirewound Resistors Power Rating at 40°C According to MIL-R-26 Also Available : RW...E Adjustable Model RW...ni Non-inductive Model	RW 30 / 203	300	5	10	6.8-270K	36.30	203.2		Available with corrugated ribbon Tubular style with radial lugs for mounting Rugged construction to withstand mechanical and environmental stresses.
	RW 30 / 267	400	5	10	8.2-390K	36.30	266.7		
	RW 30 / 305	480	5	10	10-300K	36.30	304.8		
	RW 29	11	5	-	7.5-3.3K	15.7	44.4		
	RW 30	11	5	-	33-1.1K	18.1	25.4		
	RW 31	14	5	-	5.6-3K	18.1	38.1		
	RW 32	17	5	-	5.6-4.7K	18.1	50.8		
	RW 33	26	5	-	8.2-8.2K	18.1	76.2		
	RW 35	55.0	5	-	18-20K	26.00	101.6		
	RW 36	78.0	5	-	24-30K	36.30	101.6		
	RW 37	113	5	-	33-47K	36.30	152.4		
	RW 38	159	5	-	47-68K	36.30	203.2		
RW 47	210	5	-	75-91K	36.30	266.7			
Vitreous Wirewound with Corrugated Ribbon Power Rating at 40°C Also Available: GBS...E - Adjustable	GBS 20 / 100	80.0 (50.0)	5	10	0.13-6.2	24.00	103.00		Tubular style fitted with lugs for mounting
	GBS 20 / 165	160 (100)	5	10	0.27-12	24.00	169.00		
	GBS 20 / 265	300 (180)	5	10	0.47-22	24.00	272.00		
	GBS 30 / 100	150 (90)	5	10	0.1-8.2	38.00	103.00		
	GBS 30 / 133	200 (120)	5	10	0.15-12	38.00	137.00		
	GBS 30 / 165	250 (150)	5	10	0.2-16	38.00	169.00		
	GBS 30 / 215	300 (200)	5	10	0.27-24	38.00	220.00		
	GBS 30 / 265	375 (250)	5	10	0.3-27	38.00	272.00		
	GBS 30 / 330	450 (350)	5	10	0.39-36	38.00	338.00		
	GBS 45 / 370	750 (550)	5	10	0.75-56	53.00	379.00		
GBS 60 / 370	1000 (700)	5	10	0.91-75	68.00	379.00			
Cemented Wirewound Resistors with Ferrules Power Rating at 40°C Also Available: ZWK...ni Non-inductive Model	ZWK 10	10	2	10	0.47-22K	12.8	57.3		Tubular style can be mounted by pressing into spring clips, which can be supplied Also available with machined ferrules
	ZWK 15	15	2	10	0.47-33K	15.8	62.5		
	ZWK 20	20	2	10	0.75-57K	22.1	81.2		
	ZWK 40	40	2	10	1.5-100K	22.1	103.5		
	ZWK 60	60	2	10	1.8-130K	22.1	124.0		
	ZWK 90	90	2	10	2.7-200K	22.1	170.7		
	ZWK 150	150	2	10	4.7-360K	22.1	273.2		
Cemented Wirewound Resistors with Lugs Power Rating at 40°C Also Available: ZWS...E Adjustable Model ZWS...ni Non-inductive Model	ZWS 6	6	2	10	0.82-13K	8.00	46.5		Tubular Resistors with Various Terminations Available
	ZWS 8	8	2	10	0.68-20K	10.00	51.5		
	ZWS 12	12	2	10	0.62-27K	12.60	56.5		
	ZWS 15	15	2	10	0.68-33K	12.60	64.0		
	ZWS 20	20	2	10	0.62-43K	15.60	64.0		
	ZWS 35	35	2	10	1.1-82K	15.60	102.0		
	ZWS 50	50	2	10	1.3-91K	23.60	102.0		
	ZWS 100	100	2	10	2.7-200K	23.60	167.0		
	ZWS 150	150	2	10	4.7-360K	23.60	269.0		
	ZWS 250	250	2	10	8.2-620K	34.00	335.0		
	ZWS 30 / 100	75	2	10	2.4-180K	34.00	102.5		
ZWS 30 / 133	110	2	10	3.3-240K	34.00	136.0			
Cemented with Corrugated Ribbon Power Rating at 40°C Also Available : ZBS...E - Adjustable	ZBS 20 / 100	50	5	10	0.13-6.2	24.00	103.00		
	ZBS 20 / 165	100	5	10	0.27-12	24.00	169.00		
	ZBS 20 / 265	150	5	10	0.47-22	24.00	272.00		
	ZBS 30 / 100	75	5	10	0.1-8.2	38.00	103.00		



PRODUCT DESCRIPTION	TYPE	WATTS		TOLERANCE		RESISTANCE RANGE Ω	DIMENSIONS MAX. (mm)			SPECIAL CHARACTERISTICS
		AT 25°C	± %	MIN.	MAX.		BODY Ø	BODY LENGTH	LEAD Ø	
Cemented Wirewound with Corrugated Ribbon Power Rating at 40°C Also Available : ZBS...E - Adjustable	ZBS 30 / 133	110	5	10	0.15-12	38.00	137.00		Tubular style fitted with lugs for mounting	
	ZBS 30 / 165	150	5	10	0.2-16	38.00	169.00			
	ZBS 30 / 215	200	5	10	0.27-24	38.00	220.00			
	ZBS 30 / 265	250	5	10	0.3-27	38.00	272.00			
	ZBS 30 / 330	300	5	10	0.39-36	38.00	338.00			
	ZBS 45 / 370	375	5	10	0.75-56	53.00	379.00			
Power Wirewound Resistors Power Rating at 70°C	SKF 2	2	5	10	0.1-7.5K	5	18.2	1.1	10	
	SKF 4	4	5	10	0.15-11K	5	23.3	1.1	15	
	SKF 5	5	5	10	0.22-20K	5	33.4	1.1	25	
	SKF 6.5	6.5	5	10	0.47-27K	5	43.5	1.1	35	
	SKF 8	8	5	10	0.47-36K	5	53.7	1.1	45	
Vitreous Wirewound Resistors with Ferrules Power Rating at 40°C Also Available : GWK...ni Non-inductive Model	GWK 10	10.0	2	10	1.8-16K	8.00	47.00		Tubular style can be mounted by pressing into spring clips , which can be supplied. Also available with machined ferrules.	
	GWK 20	20.0	2	10	2.2-27K	13.1	52.30			
	GWK 40	30.0	2	10	3.3-43K	16.10	62.50			
	GWK 60	40.0	2	10	6.2-82K	16.10	83.00			
	GWK 100	80.0	2	10	8.2-82K	23.00	103.50			
	GWK 150	100	2	10	12-110K	23.00	124.00			
	GWK 200	160	2	10	20-180K	23.00	170.70			
GWK 300	260	2	10	36-330K	23.00	273.20				
High Power Flat Resistors for Heatsink Mounting	FPR 73 / 90	500	5	10	3.9-68K	73.0*	90.00	40.0**	Power at 70°C	
Epoxy & Silicone Coated Axial Wirewound Resistors Power Rating at 25°C	BSI 58	1.00	0.5	5	0.1-2K	2.50	6.70	0.60	25ppm and 50ppm Temperature Coefficients Styles 58,63,68 are moulded & silicone coated Larger sizes have a dipped silicone varnish	
	BSI 63	2.00	0.5	5	1-4K	3.80	10.20	0.60		
	BSI 68	3.00	0.5	5	0.05-15K	5.80	15.50	0.80		
	BSI 516	4.00	0.5	5	0.01-20K	6.00	18.00	0.80		
	BSI 523	5.00	0.5	5	0.05-40K	6.00	25.00	0.80		
	BSI 923	6.00	0.5	5	0.05-60K	10.00	25.00	0.80		
	BSI 932	8.00	0.5	5	0.1-100K	10.00	34.00	0.80		
BSI 947	10.00	0.5	5	0.1-150K	10.00	49.00	0.80			
Heat Sink encased Wirewound Power Style RER *Wattage @ 70°C quoted Mounted(Unmounted) ** Body Width HR suffix = High Reliability RH Series are approved to CECC, RH.. HR styles have ESA approval	RH 5	8 (3.2)*	0.1	10	0.01-12K	8.6**	16.8	2	Encased in a compact and light heat sink offering complete environmental protection, great mechanical strength and easy mounting	
	RH 10	10 (4.8)*	0.1	10	0.006-20K	12.0**	19.5	2		
	RH 25	20 (7.2)*	0.1	10	0.006-62K	15.0**	28.5	2		
	RH 50	40 (9.6)*	0.1	10	0.006-130K	16.5**	50.5	2		
	RH 5 HR	4 (2.4)*	0.5	1	1-1K	10.05**	16.81	2		
Heat Sink encased Wirewound Power Resistors Industrial *Power Rating @ 70°C ** Body Width quoted Mounted (Unmounted)	SH 5	8 (3.2)*	1	5	0.1-3.3K	8.6**	16.8	2	Built for high power dissipation in industrial applications	
	SH 10	10 (4.8)*	1	5	0.1-15K	12.0**	19.5	2		
	SH 25	20 (7.2)*	1	5	0.1-33K	15.0**	28.5	2		
	SH 50	40 (9.6)*	1	5	0.1-51K	16.5**	50.5	2		
Fixing Accessories for Wirewound Resistors Equipped with AN or CN Collars Suitable for RW-RA-RSSD-RSO Power Rating at 40°C	2E	Double right angled brackets, designed to fix resistors without providing electrical contact. They can be mounted on uninsulated panels. Three version are available, see full catalogue for detail drawings.								
	SAT	Spring loaded brackets with ceramic support blocks to provide efficient thermal insulation where exceptional insulation is required (greater than 4000 V RMS in relation to ground).								
	CL	Flexible clips of special alloy to provide effective protection against corrosion and extreme working temperatures.								
	SC	Stainless steel Clip Tightener increases fixing stability and improves electrical contact.								
	PC	Ceramic block Clip holders, drilled with 3 threaded holes and guarantee an insulation voltage greater than 10,000 V RMS. They can be fitted with 6 types of clip and are supplied unassembled.								