

Wire-Wound Power Resistor



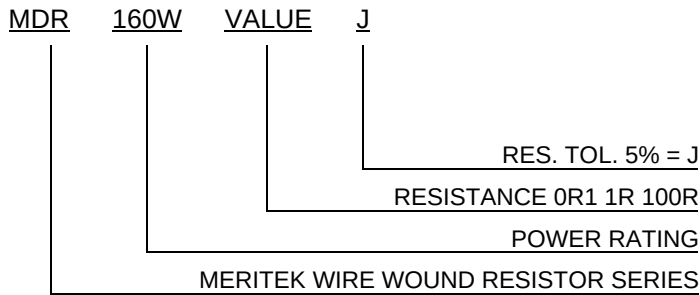
MDR / MDQR / MZR

MERITEK

FEATURES

- Spiral wound, ribbon element, nonflammable coating.
- Excellent power dissipation, small size, high power ratings.
- Excellent performance in heavy load applications.
- Rugged construction for long life.

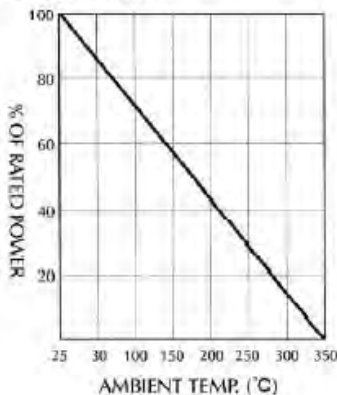
PART NUMBERING SYSTEM



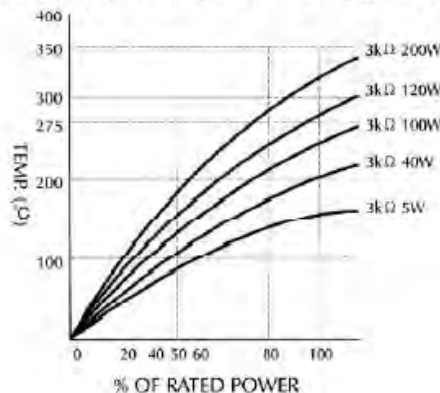
ELECTRICAL PERFORMANCE

Characteristics	Limits
Resistance and resistance tolerance	Range Resistance tolerance $\pm 5\%(J)$
Temperature coefficient	FCHR-2 0.14X1.2m/m 1000~1200ppm/°C max (according to the material)
Power rating load	$\Delta R/R \leq \pm(1\% + 0.05\Omega)$ temperature 350°C max
Short-time overload	$\Delta R/R \leq \pm(2\% + 0.05\Omega)$
Insulation resistance	DC500V 100M Ω min
Dielectric withstanding voltage	AC2500V 1.5MA 1 minute

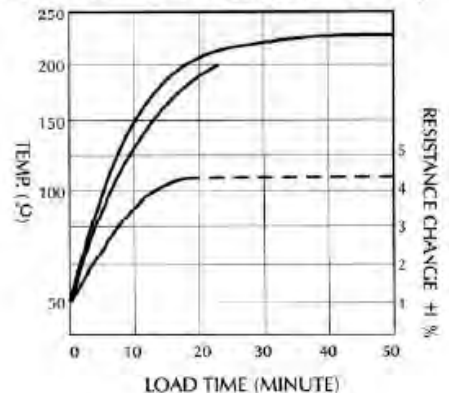
DERATING



SURFACE TEMP. VS POWER LOAD



TEMP. VS TIME (100% LOAD)



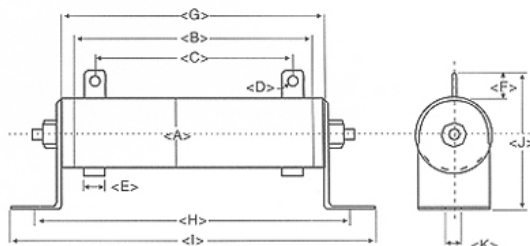
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MDR TYPE



Power Rating	DIMENSIONS(mm)											Resistance
	A±1	B±2	C±2	D±0.1	E±0.2	F±1	G±2	H±2	I±2	J±2	K±0.1	Range
MDR-10W	12.5	45	35	2.1	4	10	55	56	57	30	4	1Ω ~10KΩ
MDR-20W	16.5	60	45	3	5	12	70	84	100	37	4	1Ω ~20KΩ
MDR-30W	16.5	80	65	3	5	12	90	104	120	37	4	1Ω ~30KΩ
MDR-40W	16.5	110	95	3	5	12	120	134	150	37	4	1Ω ~40KΩ
MDR-50W	25	110	92	5.2	8	19	120	142	164	58	6	0.1Ω ~50KΩ
MDR-60W	28	90	72	5.2	8	17	101	123	145	60	6	0.1Ω ~60KΩ
MDR-80W	28	110	92	5.2	8	17	121	143	165	60	6	0.1Ω ~80KΩ
MDR-100W	28	140	122	5.2	8	17	151	173	195	60	6	0.1Ω ~100KΩ
MDR-120W	28	160	142	5.2	8	17	171	193	215	60	6	0.1Ω ~120KΩ
MDR-150W	28	195	177	5.2	8	17	206	229	250	60	6	0.1Ω ~150KΩ
MDR-160W	35	185	167	5.2	8	17	197	217	245	75	8	0.1Ω ~160KΩ
MDR-200W	35	210	192	5.2	8	17	222	242	270	75	8	0.1Ω ~200KΩ
MDR-225W	40	195	173	5.2	8	17	207	227	255	77	8	0.1Ω ~200KΩ
MDR-250W	40	210	188	5.2	10	18	222	242	270	77	8	0.5Ω ~250KΩ
MDR-300W	40	260	238	5.2	10	18	272	292	320	77	8	0.5Ω ~300KΩ
MDR-400W	40	330	308	5.2	10	18	342	380	390	77	8	0.5Ω ~400KΩ
MDR-500W	50	330	304	6.2	12	28	346	367	399	105	9	0.5Ω ~500KΩ
MDR-600W	50	400	384	6.2	12	28	416	437	469	105	9	1Ω ~600KΩ
MDR-700W	50	460	384	6.2	12	28	462	500	530	105	9	1Ω ~600KΩ
MDR-800W	60	460	425	6.2	15	30	480	504	533	112	9	1Ω ~800KΩ
MDR-1000W	60	540	505	6.2	15	30	560	584	613	112	10	1Ω ~1MΩ
MDR-3000W	65	650	620	6.2	15	30	667	700	715	115	10	1Ω ~1.3MΩ

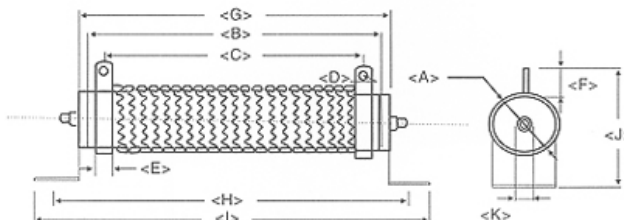
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MDQR TYPE



Power Rating	DIMENSIONS(mm)											Resistance
	A±1	B±2	C±2	D±0.1	E±0.2	F±1	G±2	H±2	I±2	J±2	K±0.1	Range
MDQR-75W	25	110	95	5.2	8	19	120	142	164	58	6	0.1Ω ~8KΩ
MDQR-90W	28	90	72	5.2	8	17	101	123	145	60	6	0.1Ω ~9KΩ
MDQR-120W	28	110	92	5.2	8	17	121	143	165	60	6	0.2Ω ~12KΩ
MDQR-150W	28	140	122	5.2	8	17	151	173	195	60	6	0.2Ω ~15KΩ
MDQR-180W	28	160	142	5.2	8	17	171	193	215	60	6	0.2Ω ~18KΩ
MDQR-225W	28	195	177	5.2	8	17	206	229	250	60	6	0.2Ω ~20KΩ
MDQR-240W	35	185	167	5.2	8	17	197	219	245	75	8	0.5Ω ~25KΩ
MDQR-300W	35	210	192	5.2	8	17	222	242	270	75	8	0.5Ω ~30KΩ
MDQR-375W	40	210	188	5.2	10	18	222	242	270	77	8	0.5Ω ~40KΩ
MDQR-450W	40	260	238	5.2	10	18	272	292	320	77	8	0.5Ω ~45KΩ
MDQR-600W	40	330	308	5.2	10	18	342	380	390	77	8	0.5Ω ~60KΩ
MDQR-750W	50	330	304	6.2	12	28	346	367	399	105	9	0.5Ω ~75KΩ
MDQR-900W	50	400	374	6.2	12	28	416	437	469	105	9	1Ω ~90KΩ
MDQR-1000W	50	460	425	6.2	12	30	480	504	533	105	9	1Ω ~100KΩ
MDQR-1200W	60	460	425	6.2	15	30	480	504	533	112	10	1Ω ~120KΩ
MDQR-1500W	60	540	505	6.2	15	30	560	584	613	112	10	1Ω ~150KΩ
MDQR-2000W	65	650	620	6.2	15	30	667	700	715	115	10	1Ω ~200KΩ

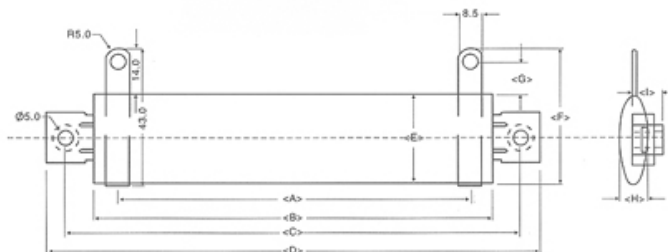
Wire-Wound Power Resistor



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MZR TYPE



Power	DIMENSIONS(mm)									Resistance
Rating	A±2	B±2	C±2	D±2	E±1	F±1	G±1	H±1	I±1	Range
MZR-80W	121.5	140	157	170	28	46	14	10	21.5	0.1Ω ~80KΩ
MZR-100W	141.5	160	177	190	28	46	14	10	21.5	0.1Ω~100KΩ
MZR-120W	166.5	185	202	215	28	46	14	10	21.5	0.1Ω~120KΩ
MZR-150W	166.5	185	202	215	35	50	14	10	21.5	0.1Ω~150KΩ
MZR-200W	191.5	210	227	240	35	50	14	10	21.5	0.1Ω~200KΩ
MZR-250W	235.5	254	271	284	35	50	14	10	21.5	0.1Ω~250KΩ
MZR-300W	281.5	300	317	330	35	50	14	10	21.5	0.1Ω~300KΩ