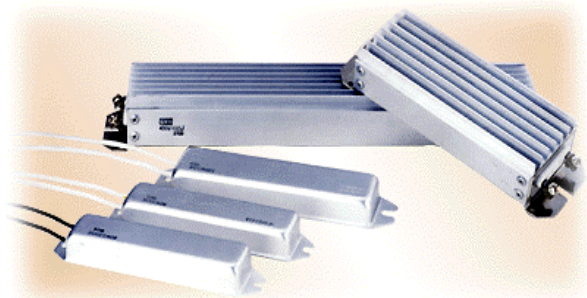


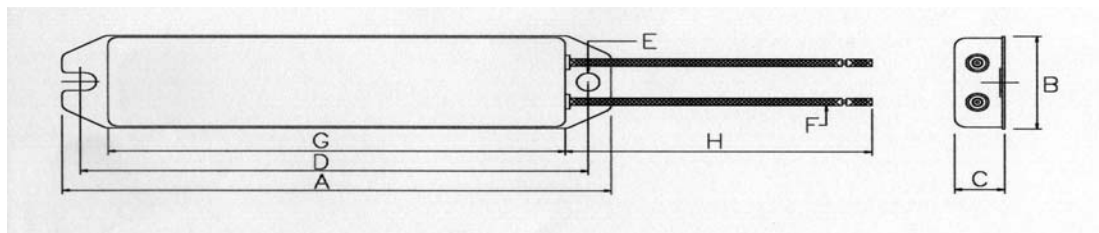
# YESO Large Capacity Metal-Clad Fixed Resistors

## AL Resistor Series



An aluminum encased resistor consists of an alloy metal coil-type resistance element assembled into an aluminum enclosure. Following high-temperature anodizing, the enclosure is filled with a special non-flammable cement paste and after hardening; insulation is applied through a high-temperature process. Since the resistor is embedded in the heat-proof cement, it is not affected by external mechanical force, dusty environments, and extreme duty. It is durable, vibration-proof, dissipates heat well, and has a low temperature coefficient, with resistance varying in direct proportion. Supporting a flexible range of applications, the product is easy to utilize and install. Applications include industrial machinery, load testing, electric power distribution, instruments, and automated control installations. For custom specifications, please contact us to discuss the details.

**ASQ TYPE High voltage, aluminum encased resistor.**



POWER RATING	DIMENSIONS 寸法 (m/m)									RESISTANCE RANGE ( $\Omega$ )
	A	B	C	D	E	F	G	H	Weight	
60W	100	30	13	90	4.5	0.75mm <sup>2</sup>	75	400	66/g	2-2.0K $\Omega$
80W	150	34	21	140	5	0.75mm <sup>2</sup>	125	400	170/g	3-2.5K $\Omega$
120W	182	42	21	172	6	0.75mm <sup>2</sup>	150	400	175/g	4-4.0K $\Omega$
220W	230	63	18	215	6.0	0.75mm <sup>2</sup>	200	400		6-4.0K $\Omega$

## PERFORMANCE SPECIFICATIONS

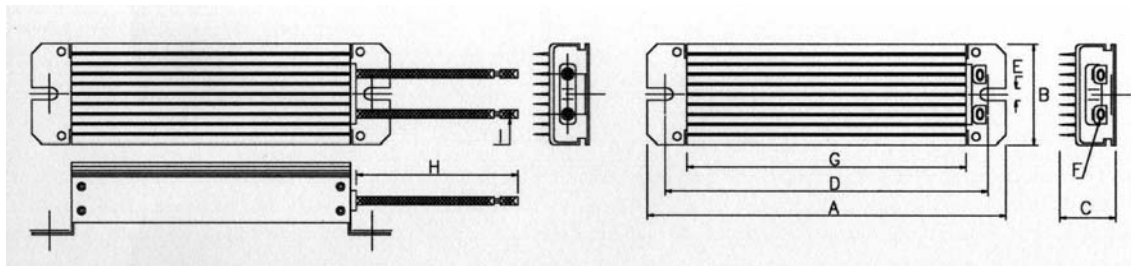
項目 TEST ITEM	試驗方法 TEST METHODS	性能 CHARACTERISTICS	Remark
電阻值容許誤差 Resistance tolerance	JIS-C-5202 5-1	Tolerance resistance $\pm 10\%$ (K)	
電阻溫度特性 Temperature coefficient	JIS-C-5202 5-2	$\pm 200$ PPM/ $^{\circ}$ C MAX	ETC
定格負荷 Power rating load	JIS-C-5202 5-4	$\Delta R/R \leq \pm (5.0\% + 0.1\Omega)$ MAX Surface temperature up 350 $^{\circ}$ C MAX Depend on alloy wire	
短時間過負荷 Short-term overload	JIS-C-5202 5-5 1000% rated power 5 seconds	Free of appearance or structural irregularity $\Delta R/R \leq \pm (2\% + 0.1\Omega)$	
絕緣抵抗 Insulation resistance	JIS-C-5202 5-6 1000VDC	100M $\Omega$ min	ETC
耐電壓 Dielectric withstanding voltage	JIS-C-5202 5-7 2000VDC 1 minute	Free of appearance or structural irregularity $\Delta R/R \leq \pm (0.1\% + 0.05\Omega)$	ETC
端子強度 Terminal strength	JIS-C-5202 6-1 8kg 30 seconds	Free of appearance or structural irregularity	ETC
電阻器強度 Resistor strength	JIS-C-5202 6-2 30kg 30 seconds	Free of appearance or structural irregularity	ETC
耐振性 Vibration	JIS-C-5202 6-3 1.5m/m 10 ~ 50 ~ 10 Hz/min X-Y-Z 2 hours each	Free of appearance or structural irregularity $\Delta R/R \leq \pm (1\% + 0.05\Omega)$	ETC
熱衝擊 Thermal shock	JIS-C-5202 7-3 Room temp 30 minutes ON-55 $^{\circ}$ C 15 minutes OFF	Resistor free of structural irregularity Crack of silicon cement surface $\Delta R/R \leq \pm (2\% + 0.1\Omega)$	
耐濕性 Humidity	JIS-C-5202 7-5 40 $^{\circ}$ C 90%RH 240 hours	Free of appearance or structural irregularity $\Delta R/R \leq \pm (3\% + 0.1\Omega)$	ETC
耐久性 Load life	JIS-C-5202 7-10 90 minutes ON - 30 minutes OFF 500 hours	Free of appearance or structural irregularity Discoloration of marking $\Delta R/R \leq \pm (5\% + 0.1\Omega)$	
難燃性 Flame retardation	JIS-C-5202 7-13-3-2 100% - 600% rated power load	US UL-94 flame retardation test V-0 grade noncombustible	

## REMARKS

1. Items noted with ETC were tested by Taiwan Electronic Testing Center as shown in report No. ET89T-03-086-C00.
2. Resistance and resistance tolerance were tested in-house with micro resistance meter.
3. Resistor coating refers to UL-certified data provided by supplier.

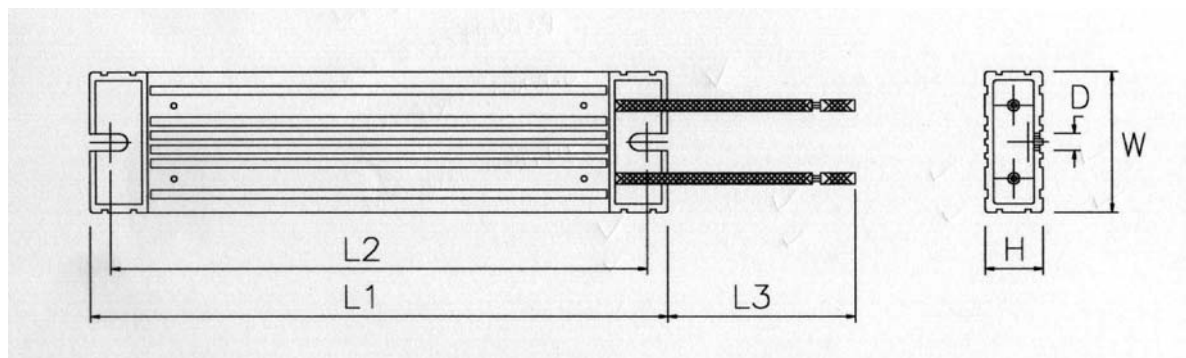
# YESO Large Capacity Metal-Clad Fixed Resistors

**ASH TYPE High voltage, aluminum encased resistor.**



POWER RATING	DIMENSIONS 寸法 (m/m)										RESISTANCE RANGE ( $\Omega$ )
	A	B	C	D	E	F	G	H	I	Weight	
200W	200	65	45	185	6	M5×8mm	160	300	2mm <sup>2</sup>	725/g	2 – 6.0K $\Omega$
300W	240	65	45	225	6	M5×8mm	200	300	2mm <sup>2</sup>	890/g	3 – 7.0K $\Omega$
400W	280	65	45	265	6	M5×8mm	240	300	2mm <sup>2</sup>	1050/9	4 – 8.0K $\Omega$
500W	320	65	45	305	6	M5×8mm	280	300	2mm <sup>2</sup>	1170/g	5 – 9.0K $\Omega$
600W	360	65	45	345	6	M5×8mm	320	300	2mm <sup>2</sup>	1295/g	6 - 10K $\Omega$
800W	440	65	45	425	6	M5×8mm	400	300	2mm <sup>2</sup>	1650/g	8 - 10K $\Omega$
1000W	520	65	45	505	6	M5×8mm	480	300	2mm <sup>2</sup>	1935/g	10 - 10K $\Omega$

**ASZ TYPE High voltage, aluminum encased resistor.**



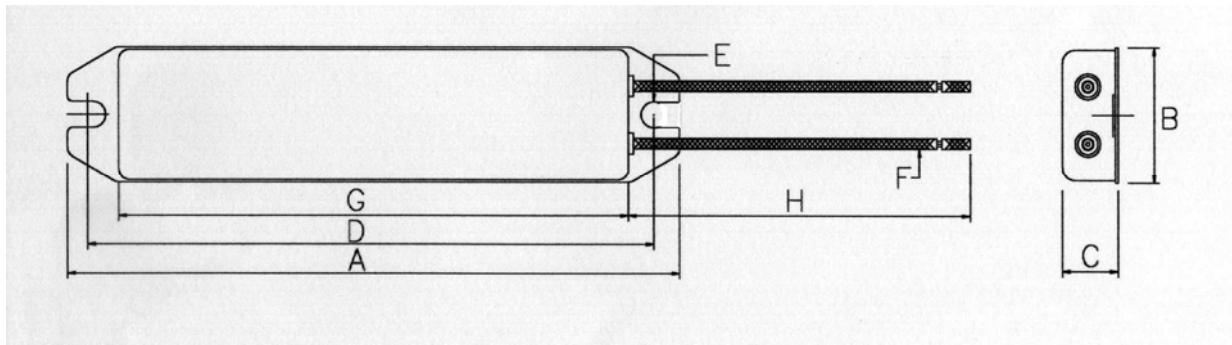
POWER RATING	DIMENSIONS 寸法 (m/m)						RESISTANCE RANGE ( $\Omega$ )	
	W±1	H±1	L1±2	L2±2	D±0.5	L3±10		Weight
60W	40	20	115	100	5.2	200	165/g	2-2K $\Omega$
80W	40	20	140	125	5.2	200	190/g	2-2.5K $\Omega$
100W	40	20	165	150	5.2	200	225/g	2-3K $\Omega$
120W	40	20	190	175	5.2	200	275/g	3-4K $\Omega$
150W	40	20	215	200	5.2	200	310/g	3-5K $\Omega$
200W	60	30	165	150	5.2	300	500/g	3-6K $\Omega$
300W	60	30	215	200	5.2	300	675/g	3-7K $\Omega$
400W	60	30	265	250	5.2	300	850/g	4-8K $\Omega$
600W	60	30	335	320	5.2	300	1070/g	6-9K $\Omega$
800W	60	30	400	385	5.2	300	1250/g	8-10K $\Omega$
1000W	100	50	400	385	5.2	300	1750/g	10-10K $\Omega$

## HOW TO ORDER

Product type.	Rated power.	Resistance value. ( $\Omega$ )	Resistance tolerance.	Assembly method.	Product status.
ASQ type ASH type ASZ type	60W~200W 200W~600W 60W~800W	( $\Omega$ )Indicates resistance value in units of ohms.	J = $\pm 5\%$ K = $\pm 10\%$	G- Horizontal mount N- No mounts. Z- Vertical mount.	A~ Special order. O~ General specification. Z~ Other.

# YESO Large Capacity Metal-Clad Fixed Resistors

ASS TYPE High voltage, aluminum encased resistor.



POWER RATING	DIMENSIONS 寸法 (m/m)								RESISTANCE RANGE ( $\Omega$ )	
	A	B	C	D	E	F	G	H		Weight
40W	90	30	9	80	4.5	0.75mm <sup>2</sup>	70	400	50/g	2-2.0K $\Omega$
60W	110	30	9	100	4.5	0.75mm <sup>2</sup>	90	400	60/g	3-2.5K $\Omega$

## 訂貨方式

ASS	60W	20 $\Omega$	K	N	O
↓	↓	↓	↓	↓	↓
成品類別	額定電力(w)	阻抗值( $\Omega$ )	容許誤差	組合方式	產品屬性
ASS type	40W~60W	表示阻抗值	J = 阻值誤差 $\pm 5\%$ K = 阻值誤差 $\pm 10\%$	G ~ 臥式固定 N ~ 無固定架	A ~ 特殊要求 O ~ 一般規格