

METAL-CLAD WIRE WOUND RESISTORS

GMR SERIES

Dimensions - 5W, 10W, 25W, 50W, 80W, 100W, 100WS, 150WS, 250W and 300W

Type A

Dimensions

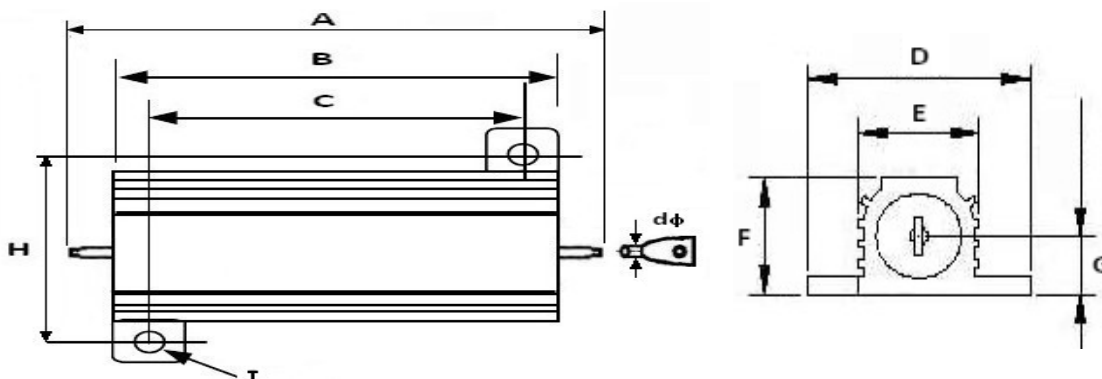
GMR-5W

GMR-10W

GMR-25W

GMR-50W

GMR-80W



Power Rating (W)	Dimension										Resistance Range
	A ref.	B ± 1	C ± 1	D ± 1	E ± 1	F ± 0.5	G ± 0.3	H ± 1	ϕ I ± 0.2	d ± 0.2	
GMR-5W	25	15	10	16.5	8.5	8	4	12.5	2	2	0.1 Ω ~50K
GMR-10W	32	19	14	20	10.5	10	5	15.5	2	2	0.1 Ω ~50K
GMR-25W	47	27	18	27	15	15.5	7	21	3.5	2.5	0.1 Ω ~100K
GMR-50W	70	50	39	29	15	15.5	7	21	3.5	2.5	0.1 Ω ~100K
GMR-80W	96	75	39	29	15	15.5	7	21	3.5	2.5	0.1 Ω ~3K

Option: 1. Straight Leads on each End 0.8 or 1.0mm Diameter

2. Screws Mounting With Nuts And Washers On each end

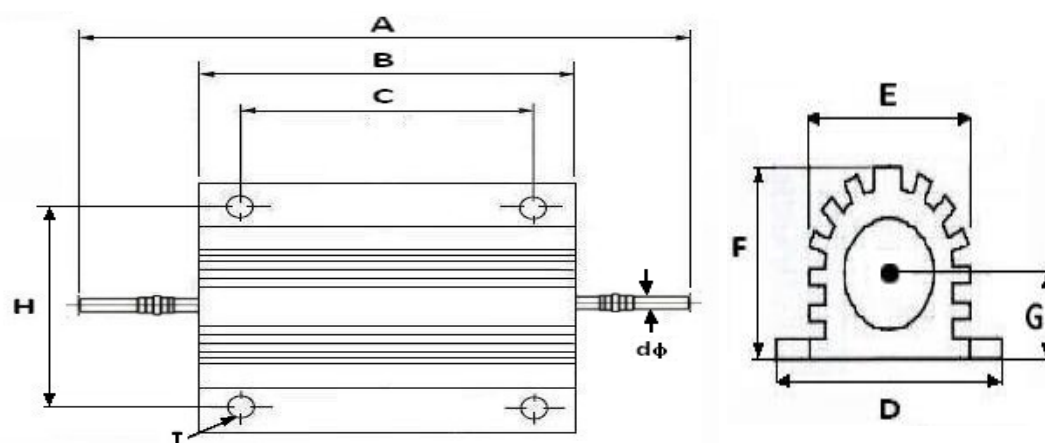
80W also available with screw mounting, refer to Type B

Type B

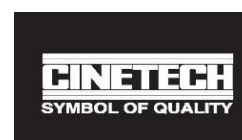
Dimensions

GMR-80W

GMR-100WS

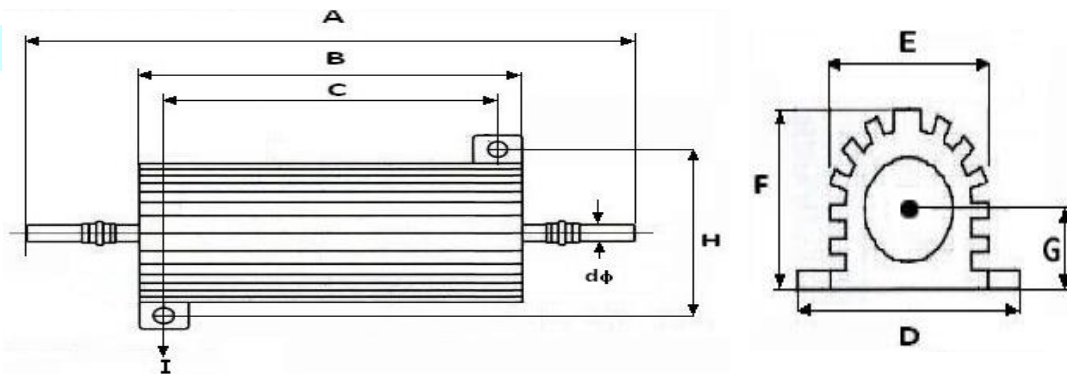


Power Rating (W)	Dimension										Resistance Range
	A ref.	B ± 1	C ± 1	D ± 1	E ± 1	F ± 0.5	G ± 0.3	H ± 1	ϕ I ± 0.2	d ± 0.2	
GMR-80W	102	66	35	47	28	25	12	37	4.5	M5	0.1 Ω ~3K
GMR-100WS	102	66	35	47	28	25	12	37	4.5	M5	0.1 Ω ~3K



Type C

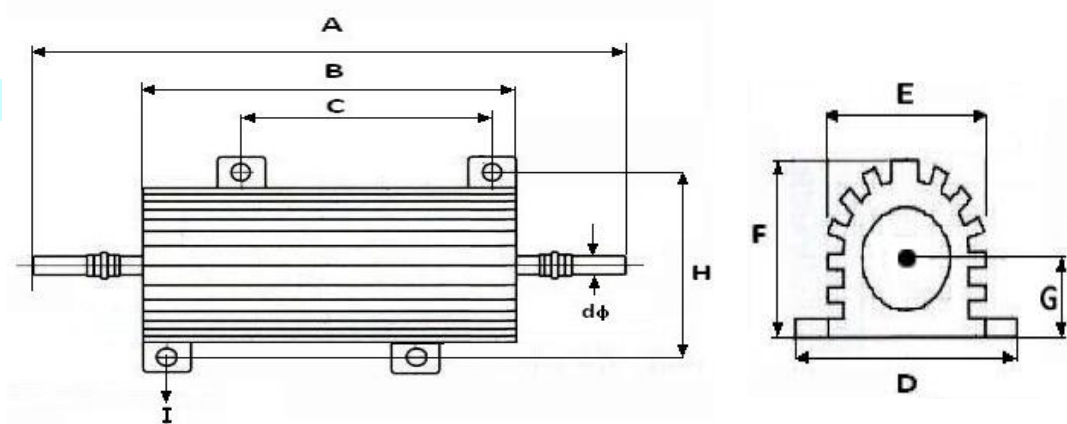
Dimensions
GMR-100W



Power Rating (W)	Dimension										Resistance Range
	A Ref.	B±1	C±1	D±1	E±1	F±0.5	G±0.3	H±1	φ I±0.2	d±0.2	
GMR-100W	135	89	69	70	46	44.5	19.5	58	5	M5	0.1Ω~3K

Type D

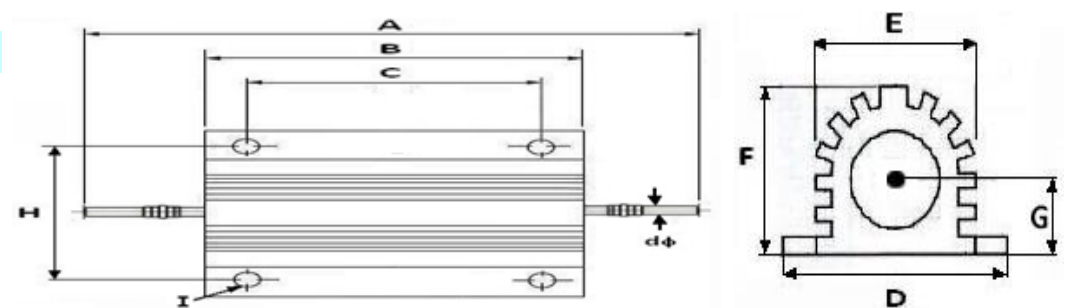
Dimensions
GMR-250W
GMR-300W



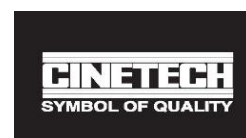
Power Rating (W)	Dimension										Resistance Range
	A ref.	B±1	C±1	D±1	E±1	F±0.5	G±0.3	H±1	φ I±0.2	d±0.2	
GMR-250W	175	114	77	77	53	55.5	25	64	5	M6	0.1Ω~3K
GMR-300W	175	114	77	77	53	55.5	25	64	5	M6	0.1Ω~3K

Type E

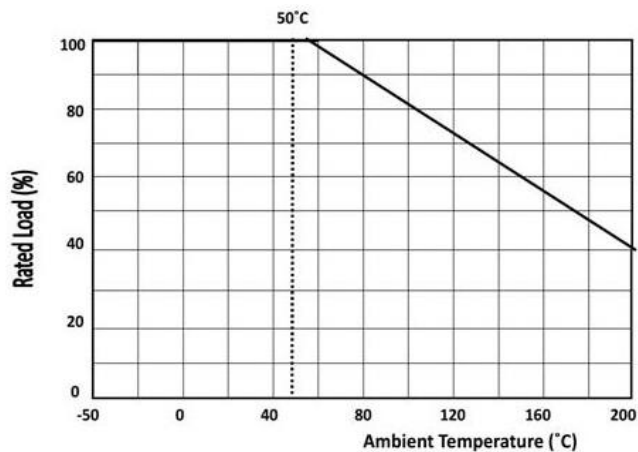
Dimensions
GMR-150WS
GMR-300W



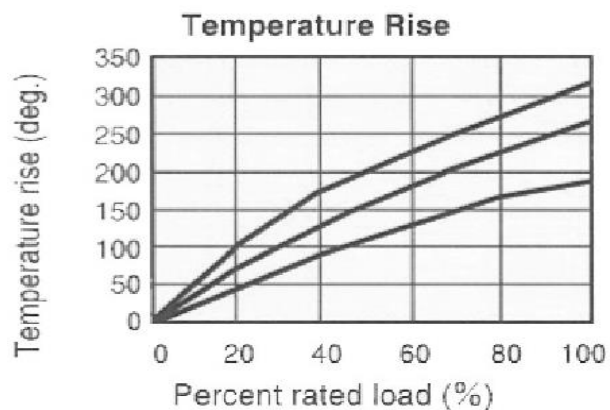
Power Rating (W)	Dimension										Resistance Range
	A ref.	B±2	C±2	D±2	E±1.5	F±1	G±1.5	H±1.5	φ I±0.5	d±0.2	
GMR-150WS	136	98	70	49	27	26	11.5	37	4.4	M5	0.1Ω~5K
GMR-300W	170	130	102	73	46.5	45	21	58	5.5	M6	0.1Ω~5K



Power Derating Curve



Temperature Rise



Electrical Specification

Characteristics	Limits	Test methods
Resistance tolerance	±1% (F) ±5% (J) ±10% (K)	JIS-C-5202 5-1
Temperature Coefficient	±200ppm/°C max.	JIS-C-5202 5-2b
Power rating load	$\Delta R/R \leq \pm (1\% + 0.05 \Omega)$ surface temp. rise 350 °C max	JIS-C-5202 5-4
Short-time overload	$\Delta R/R \leq \pm (2\% + 0.05 \Omega)$ 100% rated power 5 seconds	JIS-C-5202 5-5
Insulation resistance	DC500V 1000 M Ω min.	JIS-C-5202 5-6
Dielectric withstanding voltage	Standard 2KV, for power higher than 100W, 3KV available upon request	JIS-C-5202 5-7

Parts Number System

GMR —	A	50W	100	J
Series	Type	Wattages	Resistance	Tolerance
Golden Color Metal Clad Wire Wound Resistors	A B C D E		3 digit code for 5% 4 digit code for 1%	F = ±1% J = ±5% K = ±10%

