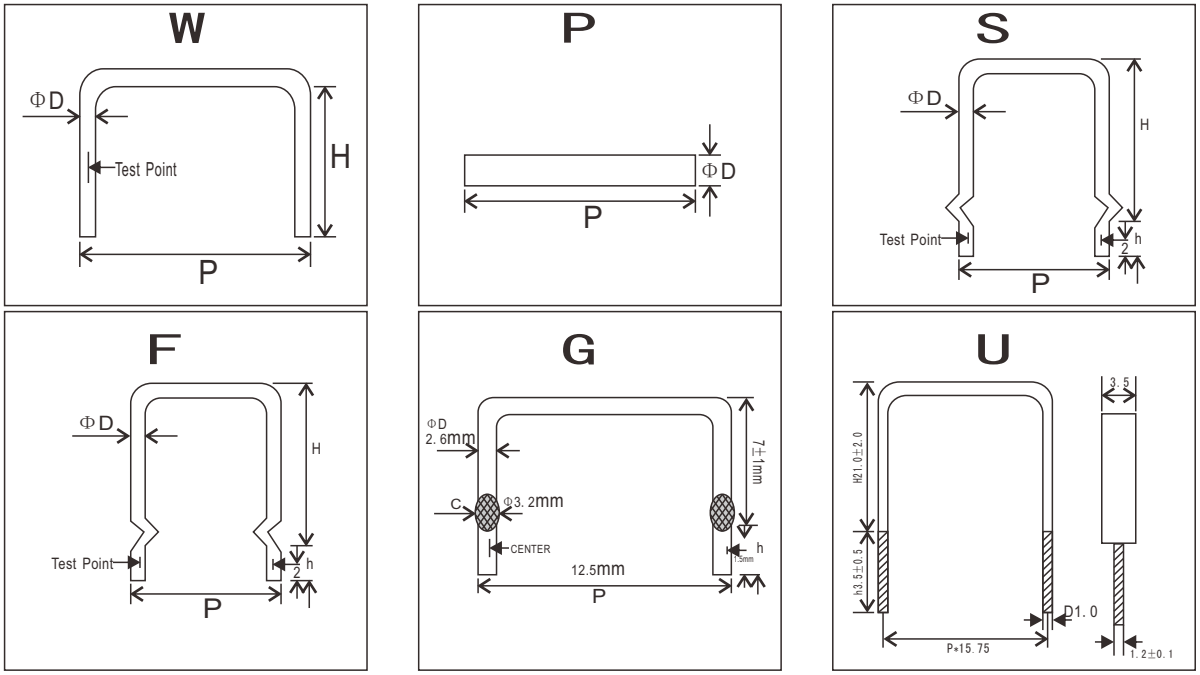
HMR Milli OHM Resistor

Features

Ⅰ Low resistance value ,lowest can be reached at 0.001Ω.
Ⅱ Operating ambient temperature:-55℃~+125.
Ⅲ Special forming types are available according to customer's requirement.
Ⅳ Resistance tolerance:±1%,±5%,±10%.
Ⅴ Low inductance.
Ⅵ High stability.

Dimensions



Type	Code	Power	Dimensions(mm)				
			ΦD±0.1	P±0.2	H±0.5	C±0.5	h±0.5
HMR	W	0.5W~5W	0.5~3.5	5~30	5~40	1~3	2.5~3.5
HMR	P	0.5W~5W	0.5~3.5	5~30	5~40	1~3	2.5~3.5
HMR	S	0.5W~5W	0.5~3.5	5~30	5~40	1~3	2.5~3.5
HMR	F	0.5W~5W	0.5~3.5	5~30	5~40	1~3	2.5~3.5
HMR	G	0.5W~5W	0.5~3.5	5~30	5~40	1~3	2.5~3.5
HMR	U	0.5W~5W	0.5~3.5	5~30	5~40	1~3	2.5~3.5

Customerized products are available , engineering support please email to kh@khxcom.com

Ordering Information

Example:

HMR	05	W	J	0R005
(1)	(2)	(3)	(4)	(5)
Series Name	Power Rating	Code	Resistance Tolerance	Resistance

(1)Type:HMR SERIES
(2)Power Rating:0.5W~5W
(3)code:W,P,S,F,G,U
(4)Tolerance: F=±1%,J=±5%,K=±10%
(5)Resistance Value:0R005=5mR,0R010=10mR,0R100=100mR

Reference Standards

JISC 5201-1

Applications And Ratings

Type	Code	Rated Power(W)	Resistance Range(Ω)	Tolerance	T.C.R	Rated Current	Temperature Range(℃)
HMR	W	0.5W~5W	0.01~0.1Ω	F=±1% J=±5% K=±10%	±10PPM/℃ ±20PPM/℃ ±50PPM/℃	0.5A~10A	-55℃~+100℃
HMR	P	0.5W~5W	0.01~0.1Ω			0.5A~10A	
HMR	S	0.5W~5W	0.01~0.1Ω			0.5A~10A	
HMR	F	0.5W~5W	0.01~0.1Ω			0.5A~10A	
HMR	G	0.5W~5W	0.01~0.1Ω			0.5A~10A	
HMR	U	0.5W~5W	0.01~0.1Ω			0.5A~10A	

Performance

Test Items	Performance	Test Methods(JIS C 5201-1)
Temperature coefficient	±10ppm/℃ ±20ppm/℃ ±50ppm/℃	Test resistance value at normal temperature and normal temperature added 100℃, calculate ℃ resistance value change rate.
Resistance to soldering heat	△R≤±0.5%R0	Immerge into the 350±10℃ tin stove for 2~3 seconds
Solderability	Soldering area is over 95%	Immerge into the 245±3℃ tin stove for 2~3 seconds
Temperature cycle	△R≤±0.5%R0	At-55℃ for 30min, then at+25℃ for 10~15min,then at +155℃ for 30min, then at +25℃ for 10~5, min,total 5cycles.
Load life in humidity	△R≤±2%R0	Overload rated voltage or Max.working voltage(get the lower)for 1000hours(1.5hours on and half-hour off) at the 40±2℃ and 90~95% relative humidity.
Load life in heat	△R≤±2%R0	Overload rated voltage or Max.working voltage(get the lower)for 1000hours(1.5hours on and half-hour off) at the 70±2℃.
Rated load	△R/R≤1%	Surface temperature rise:120℃ Max
Short-time loading	△R/R≤2%	5 times of rated power, no spark and burning damge with in 5senconds
Terminal intensity	△R/R≤1%	No mechanical damage above Φ1.0mm,5KG/10SEC within Φ0.8mm 2KG/10SEC
Resistance to vibration	△R/R≤1%	No mechanical damage
Heat resistance	△R/R≤1%	No damage (200℃ 2Hrs)
Thermal shock	△R/R≤2%	No damage(Rated load for 30min~-40℃ 15min)
Temperature frequency	△R/R≤2%	No mechanical damage and appearance change(-40℃/200℃ 5 cycles)
Life test	△R/R≤3%	100% load (90min ON 30min OFF1000Hrs)