

Power Resistors

Moulded Package
Non-Inductive



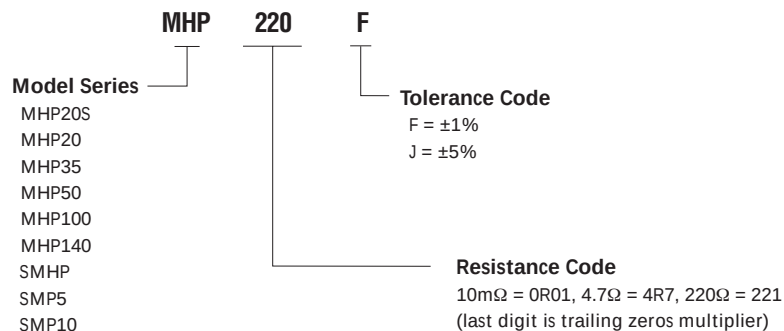
Model	MHP20S	MHP20	SMHP	SMP	MHP35
Package Style	TO-126	TO-220	TO-263	SOIC	TO-220
Construction	Thick/Thin Film	Thick/Thin Film	Thick/Thin Film	Thick Film	Thick/Thin Film
Dimensions, Inches					
Body Length, Max. (mm)	12	15	10.3	11	15
Mounted Ht., Max. (mm)	15.2	19	4.5	2	19
Body Width, Max. (mm)	8.5	10.6	10.6	8	10.6
Resistance					
Range, Ohms	0.01 to 51K	0.01 to 51K	0.01 to 51K	0.01 to 100K	0.01 to 51K
Tolerance (%)	±1, ±5	±1, ±2, ±5	±1, ±2, ±5	±1, ±5	±1, ±5
TCR ppm/°C	±50 to ±250	±50 to ±250	±50 to ±250	±100	±50 to ±250
Power Rating (Watts)	20W @ Tab Temp. <25°C ^{NOTE 2}	20W @ Tab Temp. <25°C	20W @ Tab Temp. <25°C	5, 10	35W @ Tab Temp. <25°C ^{NOTE 3}
Operating Voltage Max.	÷ PR	500 or ÷ PR	500 or ÷ PR	500Vdc or ÷ PR	500 or ÷ PR
Operating Temp. Range	-55°C to +155°C	-55°C to +155°C	-55°C to +155°C	-55°C to +155°C	-55°C to +155°C
Dielectric Strength (Volts)	2000	2000	2000	4000	2000

Specifications subject to change without notice.

1. Please call the factory for TCR values for other resistance values
2. From 220W to 51KW available on request and are rated at 10W
3. From 220W to 51KW available on request and are rated at 20W

Ordering Information

MHP20S/MHP20/MHP35/MHP50/MHP100/MHP140/SMHP/SMP5/SMP10





MHP50	BHP	MHP100	MHP140	BHPR 150 / 600
TO-220	TO-220	TO-247	TO-247	TO-227
Thick/Thin Film	Thick/Thin Film	Thick/Thin Film	Thick/Thin Film	Thick/Thin Film
15	19	20	20	38
19.0	19	20	20	11.8
10.6	10.6	16	16	25
0.01 to 51K	0.1 to 100K	.01 to 51K	0.01 to 220 ^{NOTE 6}	1 - 1K ^{SEE SCHEMATICS}
±1%, ±5%	±1%, ±5%	±1%, ±5%	±1%, ±5%	±1%, ±5%
±50 to ±250	±100	±50 to ±250	±50 to ±250	±100
50W @ Tab Temp <25°C ^{NOTE 4}	35 to 75*	100W @ Tab Temp <25°C ^{SEE NOTE 5}	140W Tab Temp <25°C	150 to 600
500 or ÷ PR	÷ PR	700 or ÷ PR	700 or ÷ PR	÷ PR
-55 to +155	-55°C to +155°C	-55°C to +155°C	-55°C to +155°C	-55°C to +155°C
2000	750	2500	2500	2500

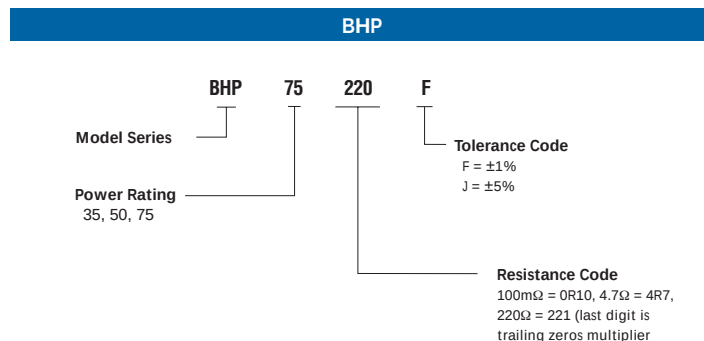
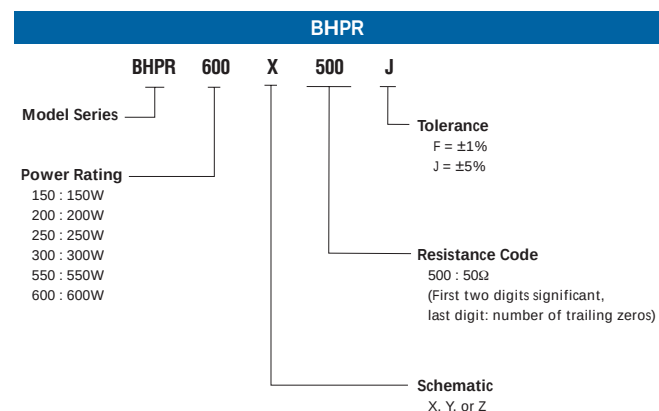
4. From 220W to 51KW available on request and are rated at 30W

5. From 220W to 51KW available on request and are rated at 50W

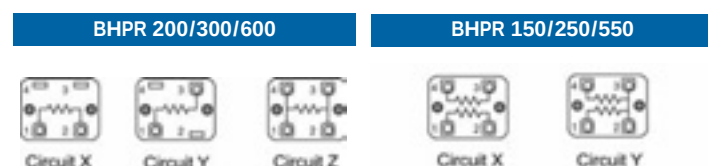
6. Higher resistance values available on request

* Please consult factory for 78W availability

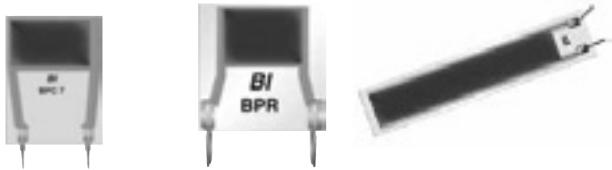
Ordering Information



Schematics



Planar Non-Inductive
Power Resistors & Heaters



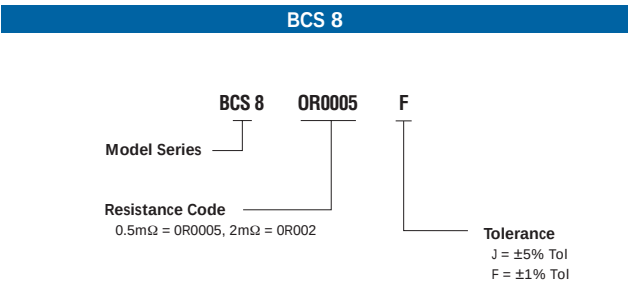
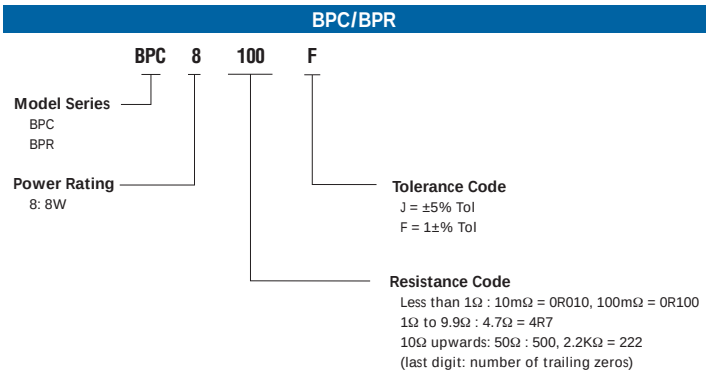
Current Sense Non-
Inductive Power Resistors



Model	BPC	BPR	Heaters	BCS 8
Package Style	Planar	Planar	Planar	5025
Construction	Thick Film	Thick Film	Thick Film	Metal Plate
Current Rating, Amps	10	10		90
Dimensions				
Body Length, Max (mm)	10.56 to 25.8	12.7 to 53.34	Custom	12.8
Mounted Height, Max (mm)	27.69	17.2 to 57.66	Custom	2.5
Body Width, Max (mm)	2.54	6.1	Custom	6.4
Resistance				
Range, Ohms	0.1 to 200K	0.1 to 200K	0.1 to 100K	0.5m to 10m
Tolerance, (%)	±1, ±2, ±5, ±10	±1, ±2, ±5, ±10	±1, ±2, ±5, ±10	±1, ±5
TCR, ppm/°C	±100	±100	±100	Typ 30
Power Rating (Watts)	3 to 10	3 to 50	3 to 200	8
Operating Voltage Max (Volts)	500 or $\div \overline{PR}$	500 or $\div \overline{PR}$	500 or $\div \overline{PR}$	
Operating Temp. Range (°C)	-55 to +155	-55 to +155	-55 to +155	-55 to +175
Peak Current (Amps)	20 x Rated up to 8ms	15 x Rated up to 8ms		126
Dielectric Strength (Volts)	5kV min	5kV min		

Specifications subject to change without notice

Ordering Information

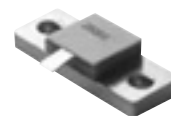


Heater

Please contact the factory for your requirements

Power RF Resistors

Power RF
Chip Attenuator



Power RF Terminations

Model	BFA	BFA	BFT
Package	SMT	SMT	Beam Lead
Construction	Thin Film	Thin Film	Thin Film
Length (mm)	8.89 to 11.43	4	5.08 to 9.52
Mounted Height (mm)	1.1	0.6	1.05
Width (mm)	5.84 to 7.62	4	2.54 to 9.52
Resistance, Ohms	50	50	50
Power, Watts	100 to 150	1	10 to 250
Attenuation (dB)	10, 20, 30, 40	0 to 40	10 to 40
VSWR			1.15 to 1.20



Power RF Resistors

Model	BRF
Package	Beam Lead
Construction	Thin Film
TC ppm/°C	±50
Length (mm)	5.08 to 9.52
Mounted Height (mm)	1.05
Width (mm)	2.54 to 9.52
Resistance, Ohms	50 to 800
Power, Watts	10 to 250
Series L (uH)	<3.2
Parallel C (pF)	<0.05 to 1

Ordering Information

BFA	BRF	BFT
Model Series Power 150 20 15, 20, 30 1 100 120 150 20 30 30	Model Series BRF Power (Watts) 250 100 10 40 50 100 120 150 250 Resistance (Ω) 50 100 50 100 100 50 100	Model Series BFT Power (Watts) 250 10 30 100 250