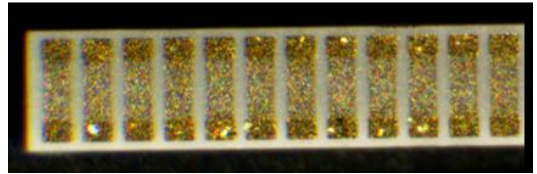


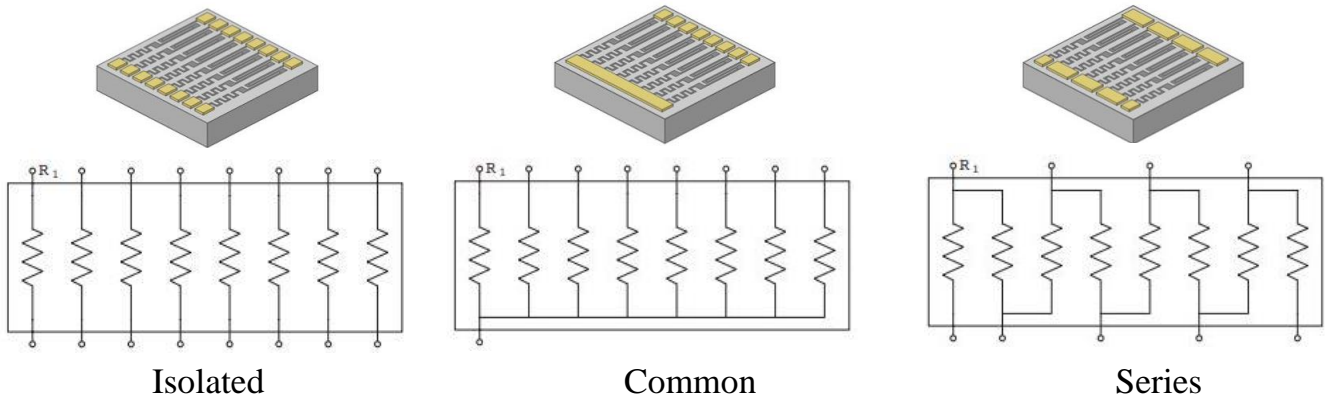
Standard Resistor Array

PS, PB, PI Series



12 Resistor Isolated Array

- Configured in 3 to 12 resistor combinations with all resistors at the same value and tolerance
- Custom arrays can be designed to engineer's specifications
- Can be used in Non-Magnetic Applications



◆ Part Numbering

P I T 12 35 - 130×60×10 A 200R0 G Q C W

P = Passive Plus

Resistor Style

- I = Isolated Array
- B – Common-Bus Array
- S = Series Array

Resistive Material

- T = Tantalum Nitride

Number of Resistors

Substrate

See Charts on next page

Length and Width

Thickness

10 mils standard

Packaging

W = Waffle Pack (Standard)*

Power Handling

C = 50mW

TCR

See Charts on next page

Resistance Tolerance

See Charts on next page

Resistance Value

Digits 1-4 are significant figures
Digit 5 is the number of zeros to follow
When required, the "R" is used as a decimal point
and the exponent is omitted.
e.g. 100R5 = 100.5Ω, 10000 = 1000Ω, 10001 = 10000Ω

Termination

See Charts on next page

* All parts are supplied in waffle packs. Other packaging may be available. Contact PPI for additional packaging options.

Standard Resistor Array

◆ Product Specifications

Resistance Range	5Ω to 100kΩ per resistor (Alumina) 5Ω to 1MΩ per resistor (Silicon)
Resistive Material	Tantalum Nitride
Ratio Tolerance	To 0.01% value dependent

Resistors	3	4	5	6	7	8	9	10	11	12
Length (mils)	40 (0.04")	50 (0.05")	60 (0.06")	70 (0.07")	80 (0.08")	90 (0.09")	100 (0.10")	110 (0.11")	120 (0.12")	130 (0.13")
Width	60 mils (0.06") standard									
Thickness	10 mils (0.01") standard									
Power	50 mW/ Resistor standard									

◆ Substrate Materials

Recommended Substrates	Code
99.6% Alumina (Al ₂ O ₃)	35
Silicon (SiO ₂)	20

◆ Terminations

Metallization		Code
Top Side	Bottom Side	
Pd/Au	—	A
Pd/Au	Ta/Pd/Au	D
Pd/Au	Au (Sputtered)	K

◆ Temperature Coefficient of Resistance

TCR	Available on		Code
	TaN	NiCr	
±150ppm/°C	Standard	No	Q
±100ppm/°C	Yes	No	V

◆ Resistance Tolerance Codes

Tolerance*	B	D	F	G	H	J	K	L	M	Q	S
Code	± 0.1%	± 0.5%	± 1%	± 2%	± 3%	± 5%	± 10%	± 15%	± 20%	± 0.05%	± 0.01%

* Limit of ± 50mΩs

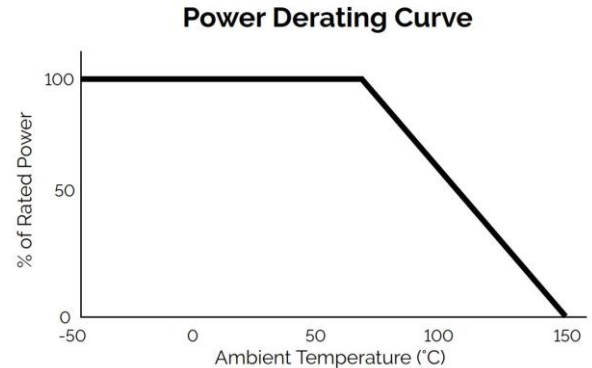
◆ Performance Specifications

Typical PPI commercial testing includes 100% visual inspection, 100% electrical testing and TCR sampling. Our parts meet or exceed additional MIL-PRF-55342 and MIL-STD-202 requirements.

Standard Resistor Array

◆ General Properties

Operating Temperature	-55°C to +150°C
Storage Temperature	-65°C to +150°C
Operating Frequency	DC to 500 MHz
Power Derating (See Chart at Right)	Full power up to 70°C Derated linearly to zero power at 150°C



◆ Testing

Testing Performed	Specification / Standard
Visual Inspection	MIL-PRF-55342 MIL-STD-883
Mechanical Inspection	MIL-PRF-55342
DC Resistance	MIL-PRF-55342 MIL-STD-202
Resistance Temperature Characteristics (TCR)	MIL-PRF-55342
Short Time Overload	MIL-PRF-55342
High Temperature Exposure	MIL-PRF-55342
Thermal Shock	MIL-PRF-55342 MIL-STD-202
Resistance to Bonding Exposure	MIL-PRF-55342
Wire Bonding Integrity	MIL-PRF-55342
Life Test	MIL-PRF-55342 MIL-STD-202

◆ Performance Specifications

Higher power ratings, additional sizes, and custom resistors may be available. Please contact sales@passiveplus.com.

◆ Packaging

ESD waffle packs are standard. Film rings and gel pack packaging may be available upon request.

