BBi RANGE

HARWiN

COMPONENT SPECIFICATION

C05604

Pogo Pins (Spring Loaded Contacts)

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1. DESCRIPTION

Pogo Pins are a spring-loaded contact constructed of several components – an internal spring, with plunger, and an outer body. They are designed to give a single contact surface-to-surface connection, maintained by the spring force. These connectors are highly durable, with a higher number of mating cycles possible than a comparable metal folded spring contact.

The product range includes two main body styles, both surface mount - one style with a location peg, and one without. The longer location pegs could also be used as throughboard terminations. The pogo pins are compatible for use with the SMT Contact Pad range. Many of the designs have a barb or other retention feature around the body, making them suitable for use as an inserted contact in a customer's own housing.

All pogo pins are supplied with a gold plating finish all over. Almost all parts are supplied on tape and reel for surface-mount assembly.

2. RATINGS

NOTE:

- For product materials and finishes, see the individual Technical Drawings.

2.1. Electrical Characteristics

Current Rating (at 25°C) ..... See table in section 2.4
Ensure the pogo pin is fully mated with the contact surface before applying power, to minimize the risk of arcing.
Contact Resistance ..... See table in section 2.4

2.2. Environmental Characteristics

Operating Temperature Range: ..... -40°C to +85°C

2.3. Mechanical Characteristics

Durability ..... 10,000 mating cycles min
Spring Force ..... See table in section 2.4
Working Height ..... See table in section 2.4

2.4. Individual Characteristics

Part Number	Physical Characteristics		Electrical Characteristics		Mechanical Characteristics					
	Termination Style	With Location Peg?	Current Rating (max)	Contact Resistance (max)	Free Height (nominal)	Max Working Height (minimum compression)	Min Working Height (maximum compression)	Spring Force		
								Newtons (N)	Gram-force (gf)	Height at which the force applies
P70-1000045R	Surface Mount	No	2A	30mΩ	3.50mm	3.00mm	2.70mm	0.88 ±0.29	90 ±30	2.90mm
P70-1010045R	Surface Mount	No	2A	30mΩ	5.00mm	4.20mm	3.70mm	1.17 ±0.29	120 ±30	4.00mm
P70-1020045R	Surface Mount	No	2A	30mΩ	5.50mm	4.70mm	4.20mm	1.17 +0.29/-0.19	120 +30/-20	4.50mm
P70-1030045R	Surface Mount	No	2A	30mΩ	7.30mm	6.20mm	6.00mm	1.29 ±0.29	132 ±30	6.20mm
P70-1100045R	Surface Mount	No	2A	30mΩ	6.30mm	5.30mm	4.70mm	1.22 ±0.34	125 ±35	5.00mm
P70-2000045R	Surface Mount	Yes	2A	30mΩ	3.60mm	3.10mm	2.85mm	1.27 ±0.34	130 ±35	2.90mm
P70-2010045R	Surface Mount	Yes	2A	30mΩ	5.00mm	4.20mm	3.85mm	1.32 +0.39/-0.29	135 +40/-30	4.00mm
P70-2100045R	Surface Mount	Yes	2A	30mΩ	5.50mm	4.70mm	4.20mm	0.68 ±0.24	70 ±25	4.50mm
P70-2200045	Surface Mount	Yes	2A	30mΩ	8.20mm	7.20mm	6.40mm	0.98 ±0.19	100 ±20	7.10mm
P70-2300045R	Surface Mount	Yes	2A	30mΩ	6.20mm	5.20mm	4.60mm	0.83 ±0.25	85 ±25	4.90mm
P70-3010045R	Surface Mount	Yes	10A	30mΩ	6.00mm	5.50mm	4.80mm	0.98 ±0.20	100 ±20	5.20mm
P70-3020045R	Surface Mount	Yes	5A	30mΩ	7.40mm	5.70mm	5.00mm	0.98 ±0.20	100 ±20	5.20mm
P70-3030045R	Surface Mount	Yes	10A	30mΩ	7.65mm	6.90mm	6.70mm	0.98 ±0.25	100 ±25	6.80mm
P70-3040045R	Surface Mount	Yes	8A	30mΩ	10.85mm	9.25mm	8.95mm	4.90 ±1.08	500 ±110	9.05mm
P70-3050045R	Surface Mount	Yes	15A	20mΩ	7.30mm	6.30mm	5.70mm	1.96 ±0.29	200 ±30	5.90mm
P70-3060045R	Surface Mount	Yes	18A	30mΩ	8.90mm	7.80mm	7.30mm	1.96 ±0.39	200 ±40	7.60mm
P70-3070045R	Surface Mount	Yes	10A	20mΩ	9.30mm	8.20mm	7.60mm	1.47 ±0.29	150 ±30	7.80mm
P70-5000045R	Surface Mount	No	1A	30mΩ	2.40mm	2.00mm	1.85mm	0.68 ±0.19	70 ±20	1.90mm
P70-5100045	Surface Mount	No	2A	30mΩ	4.80mm	4.20mm	3.85mm	0.98 ±0.29	100 ±30	4.00mm
P70-6000045R	Surface Mount	Yes	1A	30mΩ	2.80mm	2.20mm	1.90mm	0.39 ±0.09	40 ±10	2.10mm
P70-7000045	Surface Mount	No	2A	30mΩ	2.50mm	2.10mm	1.95mm	0.68 ±0.19	70 ±20	2.00mm

NOTE:

- All heights are the height above PCB, and do not include any location peg length.