

# Contact Probes

## Contact Probes



| Product Name | Contact Probe Assembly Service | Double Tipped Probes | Contact Probes, Receptacles - Minimum Mounting Pitch 0.5mm ~ 4.5mm Series |
|--------------|--------------------------------|----------------------|---|
| Page         | 1865                           | 1866                 | 1867~1875   |



Turn Probes  
1876



Contact Probe Assemblies - Standard  
1877



Screw Mounting  
1877



Resin Sleeve  
1877



Spring Built-In  
1878



Thread Wire Connection  
1878



Switch Probes  
1879



Terminals for Probes  
1879



Terminals for Probes  
1879



Heat-Shrink Tubes  
1879



Circuit Board Guide Pins  
1880



Circuit Board Pusher Pins  
1880



Circuit Board Rough Guides  
1880

# Contact Probes

## Overview

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Contact Probes can be used in connection tests of all electronic circuits.

### How to Use

Press-fit appropriate receptacles in the mating holes drilled in a bakelite or other plastic plate. If the mating holes are loose, use appropriate adhesives (Loctite, etc.) to fill the gap. After press fitting, wire the receptacles. If wires need to be soldered, do not solder past the stopper in the receptacle. After wiring, insert Contact Probes. Pressing plungers too hard may cause damage to the tip or internal components of Contact Probes and result in performance degradation.

It is recommended to make several tests under operating environment before actual use.

### Major Types and Typical Uses

| Type                 | Typical Uses   |
|----------------------|--|
| Contact Probes       | Suitable for extensive use in testing printed circuit boards, mounted circuit boards, semiconductors/in-circuit, harnesses, etc.                   |
| Double Tipped Probes | Suitable for narrow pitch mounting since receptacle is not needed.   |
| Turn Probes          | The plunger rotates with stroke movements to destroy flux and oxide film. Proven successful in open/short circuit tests of printed circuit boards. |
| Integrated Probes    | Contact Probe constructed in end-to-end one continuous piece. Permits stable electrical conduction regardless of the stroke length.                |

### Selection Table

Printed in Black: Products available on our website

| Type                        | Mounting Pitch (min.) | Full Stroke | Spring Pressure (2/3 Stroke) | Part Number  |             | Page           |   |
|-----------------------------|-----------------------|-------------|------------------------------|--------------|-------------|----------------|---|
|                             |                       |             |                              | Probe        | Receptacles |                |   |
| Double Tipped Probes        | 0.3                   | 1.3         | 6                            | RNP20        | -           |                |   |
|                             | 0.5                   | 0.8         | 15                           | RNP30        | -           |                |   |
|                             |                       | 1.0         | 15                           | RNP38        | -           |                |   |
|                             |                       | 0.98        | 25                           | RNP38N       | -           |                |   |
|                             | 0.8                   | 1.0         | 25                           | RNP50        | -           |                |   |
|                             |                       | 0.98        | 30                           | RNP57        | -           |                |   |
|                             |                       | 1.0         | 30                           | RNP64        | -           |                |   |
|                             | 1.0                   | 0.5         | 25                           | RNP60ST      | -           |                |   |
|                             |                       | 0.98        | 35                           | RNP85        | -           |                |   |
|                             |                       | 0.5         | 30                           | RNP80ST      | -           |                |   |
|                             | 0.50                  | 2.0         | 16                           | NP26         | NR26        |                |   |
|                             | 0.60                  |             | 22                           | NP31         | NR31/NR31S  |                |   |
| 23                          |                       |             | NP31HD                       |              |             |                |   |
| 0.80                        | 35                    |             | NP38                         | NR38/NR38S   |             |                |   |
| 0.90                        | 50                    |             | NP20                         | NR20K        |             |                |   |
| 1.00                        | 50                    | NP58        | NR58                         |              |             |                |   |
| Contact Probe               | 1.27                  | 2.5         | 45                           |              | NP30        | NR30K/NR30SH-B |   |
|                             |                       |             | 46                           | NP30HD       |             |                |   |
|                             |                       |             | 50                           | NP72         |             |                |   |
|                             |                       |             | 100                          | NP72HD       | NR72K       |                |   |
|                             |                       |             | 50                           | NP68S3SF     | NR68/NR68S  |                |   |
|                             | 90                    | NP68S3      |                              |              |             |                |   |
|                             | 1.40                  | 4.3         | 150                          | NP76         | NR76        |                |   |
|                             |                       |             | 50                           | NP68SF       | NR68/NR68S  |                |   |
|                             |                       |             | 90                           | NP68         |             |                |   |
|                             | 1.50                  | 2.5         | 50                           | NP88         | NR88        |                |   |
| 100                         |                       |             | NP88HD                       |              |             |                |   |
| 50                          |                       |             | NP45S3SF                     | NR45S        |             |                |   |
| 1.70                        | 3.0                   | 100         | NP45S3                       |              |             |                |   |
|                             |                       | 50          | NP45SF                       |              |             |                |   |
|                             |                       | 100         | NP45                         | NR45/NR45T   |             |                |   |
| 2.00                        | 6.5                   | 150         | NP45HD                       |              |             |                |   |
|                             |                       | 50          | NP120                        | NR120/NR120T |             |                |   |
|                             |                       | 100         | NP120HD                      |              |             |                |   |
| Receptacles Receptacle-less | 2.54                  | 4.0         | 100                          | TP604        | NR604       |                |   |
|                             |                       |             | 110                          | NP604        |             |                |   |
|                             |                       |             | 160                          | NP604HD      |             |                |   |
|                             |                       | 6.4         | 50                           | NP60SF       | NR60        |                |   |
|                             |                       |             | 100                          | NP60S        |             |                |   |
|                             |                       |             | 150                          | NP60/NP60H   |             |                |   |
|                             |                       |             | 170                          | NP60HD       |             |                |   |
|                             |                       |             | 50                           | NP84SF       |             | NR84           |   |
|                             |                       |             | 126                          | NP84         |             |                |   |
|                             | 3.00                  | 6.3         | 200                          | NP84HD       |             |                |   |
|                             |                       |             | 50                           | NP90SF       | NR90        |                |   |
|                             |                       |             | 150                          | NP90         |             |                |   |
|                             | 3.50                  | 6.4         | 250                          | NP90HD       |             | NR89           |   |
|                             |                       |             | 100                          | NP89SF       |             |                |   |
|                             |                       |             | 275                          | NP89S        |             |                |   |
| 4.50                        | 7.0                   |             | 450                          | NP89         |             |                |   |
|                             |                       |             | 50                           | NP90SF       | NR90        |                |   |
|                             |                       |             | 150                          | NP90         |             |                |   |
| 1.90                        | 7.0                   | 170         | NP16                         | -            |             |                |   |
| Turn Probe                  | 1.27                  | 4.5         | 50                           | TNP72        | NR72        |                |   |
|                             | 1.90                  | 5.5         | 140                          | TNP10        | NR10        |                |   |
|                             | 2.54                  | 6.4         | 165                          | TNP60        | NR60        |                |   |
| Integrated Probe            | 0.80                  | 3.4         | 80                           | GNP6         | -           |                |   |
|                             | 1.00                  |             | GNP8                         | -            |             |                |   |
|                             | 1.50                  |             | 4.0                          | 95           | GNP12       |                | - |
|                             | 3.00                  |             | 4.5                          | 105          | FNP10       |                | - |
|                             | 5.00                  |             | 4.0                          | 100          | FNP13       |                | - |
|                             | 3.00                  | 7.0         | 100                          | FNP22SF      | -           |                |   |
|                             |                       |             | 150                          | FNP22        | -           |                |   |
|                             |                       |             | 180                          | FNP22        | -           |                |   |
|                             |                       | 4.00        | 8.0                          | 200          | FNP22       |                | - |
|                             |                       |             |                              | 200          | FNP22       |                | - |
|                             | 5.00                  | 17.0        | 220                          | FNP40SF      | -           |                |   |
|                             |                       |             | 300                          | FNP40        | -           |                |   |
|                             |                       |             | 455                          | MNP50        | -           |                |   |
|                             | 7.00                  | 7.6         | 455                          | MNP50        | -           |                |   |