



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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■ PRF18/21_471Q Series

No.	Item	Rating Value	Method of Examination									
1	Resistance Value at 25°C	Within the specified range	After applying maximum operating voltage for 3 mins. and leaving for 2 hours in 25°C, measured by applying voltage less than DC1.5V. (by a direct current less than 10mA)									
2	Adhesive Strength	There is no sign of exfoliation on electrode.	Reference standard: IEC 60068-2-21 (2006) · Soldered PTC to PCB (**) · Force: 5.0N · Test time: 10 sec.									
3	Vibration	· Appearance: No defects or abnormalities · Resistance (R25) change: Less than ±20% (*)	Reference standard: IEC 60068-2-6 (2007) · Soldered PTC to PCB (**) · Frequency range: 10 to 55Hz · Amplitude: 1.5mm · Sweep rate: 1 octave/min. · Direction: X-Y-Z (3 direction) · 24 cycles in each axis									
4	Solderability	Wetting of soldering area: ≥95%	Reference standard: IEC 60068-2-58 (2004) · Solder: Sn-3.0Ag-0.5Cu · Solder temp.: 245±5°C · Immersion time: 3±0.3s									
5	Resistance to Soldering Heat	· Appearance: No defects or abnormalities · Resistance (R25) change: Less than ±20% (*)	Reference standard: IEC 60068-2-58 (2004) [Solder bath method] · Solder: Sn-3.0Ag-0.5Cu · Preheat: 150±5°C, 90 to 120s · Solder temp.: 260±5°C · Immersion time: 10±1s									
6	High Temperature Storage	· Appearance: No defects or abnormalities · Resistance (R25) change: Less than ±20% (*)	Reference standard: IEC 60068-2-2 (2007) · Soldered PTC to PCB (**) · +150±2°C · 1000+48/-0 hrs.									
7	Low Temperature Storage		Reference standard: IEC 60068-2-1 (2007) · Soldered PTC to PCB (**) · -20±3°C · 1000+48/-0 hrs									
8	Damp Heat, Steady State		Reference standard: IEC 60068-2-67 (1995) · Soldered PTC to PCB (**) · +40±2°C, 90±5%RH · 500+24/-0 hrs									
9	Thermal Shock		Reference standard: IEC 60068-2-14 (2009) [Test Na] · Soldered PTC to PCB (**) · Transport time: <10 sec. · Test condition: See below table <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Step</th> <th>Condition</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-20±3°C</td> <td>30min.</td> </tr> <tr> <td>2</td> <td>+150±2°C</td> <td>30min.</td> </tr> </tbody> </table>	Step	Condition	Time	1	-20±3°C	30min.	2	+150±2°C	30min.
Step	Condition		Time									
1	-20±3°C	30min.										
2	+150±2°C	30min.										
10	High Temperature Load	Reference standard: IEC 60068-2-2 (2007) · Soldered PTC to PCB (**) · +85±2°C · Applied max. voltage · 1000+48/-0 hrs.										

*: The resistance value after the test. It is measured by applying voltage less than DC1.5V (by a direct current less than 10mA) after left at 25±2°C for 2hrs.

** : Above mentioned soldering is done under the following conditions at our side.

- Glass-Epoxy PC board
- Standard land dimension
- Standard solder paste
- Standard solder profile

Above conditions are mentioned in Notice.