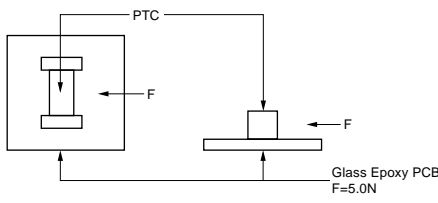


■ PRF18/21 Series

No.	Item	Rating Value	Method of Examination															
1	Resistance Value (at 25°C)	The resistance value should be within the specified tolerance.	After applying maximum operating voltage for 3 minutes and leaving for 2 hours at 25°C, measured by applying voltage of less than 1.5Vdc (by a direct current of less than 10mA).															
2	Adhesive Strength	There is no sign of electrode exfoliation	EIAJ ET-7403 term 9 Solder PTC to PCB and add a force of 5.0N in the direction shown below. 															
3	Vibration	Normal appearance Resistance change: not to exceed $\pm 20\%$ (*)	JIS C 5102 term 8.2 Soldered PTC to PCB Vibration: 10-55-10Hz (1 min.) Width: 1.5mm Vibrate for 2 hours in each of 3 mutually perpendicular planes for a total of 6 hours.															
4	Solderability	Min. 75% electrode is covered with new solder. Resistance change: not to exceed $\pm 20\%$ (*)	JIS C 5102 term 8.4 Solder: Sn 63%/Pb 37% (or 60/40%) Solder temp: $230 \pm 5^\circ\text{C}$ Soaking time: $3 \pm 0.5$ seconds. Soaking position: Until a whole electrode is soaked.															
5	Solder-heatability	Normal appearance Resistance change: not to exceed $\pm 20\%$ (*)	Solder: Sn 63%/Pb 37% (or 60/40%) Flux: Solder paste containing less than 0.2wt% of chlorine. Preheating: $150 \pm 5^\circ\text{C}$ 3 minutes. Peak temp.: $260 \pm 5^\circ\text{C}$ $10 \pm 5$ seconds. (reflow) PCB: Glass Epoxy PCB (JIS C 6484)															
6	Temperature Cycling	Normal appearance Resistance change: not to exceed $\pm 20\%$ (*)	JIS C 5102 term 9.3 Times: 5 cycles <table border="1" data-bbox="941 1176 1316 1310"> <thead> <tr> <th>Step</th> <th>Temp. (°C)</th> <th>Time (minute)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-20 +0, -3</td> <td>30</td> </tr> <tr> <td>2</td> <td>Room temp.</td> <td>10-15</td> </tr> <tr> <td>3</td> <td>+150 +3, -0</td> <td>30</td> </tr> <tr> <td>4</td> <td>Room temp.</td> <td>10-15</td> </tr> </tbody> </table>	Step	Temp. (°C)	Time (minute)	1	-20 +0, -3	30	2	Room temp.	10-15	3	+150 +3, -0	30	4	Room temp.	10-15
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7	Humidity Test	Normal appearance Resistance change: not to exceed $\pm 20\%$ (*)	JIS C 5102 term 9.5 $40 \pm 2^\circ\text{C}$ , 90-95%RH leave for $500 \pm 8$ hours.															
8	High Temperature Load Test	Normal appearance Resistance change: not to exceed $\pm 20\%$ (*)	JIS C 5102 term 9.10 $85 \pm 5^\circ\text{C}$ (in air), load maximum operating voltage for $1000 \pm 12$ hours.															

(\*) Measurement resistance after the test by applying voltage of less than 1.5Vdc by a direct current of less than 10mA after product is left at  $25 \pm 2^\circ\text{C}$  for 2 hours.

Above mentioned soldering in "2. Adhesive Strength" and "3. Vibration" is done following condition at our side.

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

Above conditions are mentioned in Notice.