

**1. Scope :**

This specification applies to silicon resistor chips,  
Device No. CR-0012.

**2. Structure :**

- 2-1. Silicon substrate .
- 2-2. Electrodes :  
Top side : (Negative) Aluminum alloy .  
Back side : ( Positive ) Gold alloy.

**3. Size :**

- 3-1. Chip size : 13 mils × 11 mils (0.330mm × 0.279 mm ).
- 3-2. Chip thickness :  $8.6 \pm 1$  mils (0.220mm ± 0.025 mm ).
- 3-3. Bonding pad : 6 mils × 5 mils (0.152 mm × 0.127 mm ).
- 3-4. Pattern drawing : Refer to the attached drawing.

**4. Electrical characteristics (Ta = 25 °C)**

| RESISTOR( $\Omega$ ) | APPLY CURRENT(mA) | RESISTOR( $\Omega$ ) |      |      | UNIT |
|----------------------|-------------------|----------------------|------|------|------|
|                      |                   | MIN                  | TYP  | MAX  | ohm  |
| 100                  | 20 mA             | 90                   | 100  | 110  | ohm  |
| 200                  | 20 mA             | 180                  | 200  | 220  | ohm  |
| 240                  | 20 mA             | 215                  | 240  | 265  | ohm  |
| 480                  | 20 mA             | 432                  | 480  | 528  | ohm  |
| 600                  | 10 mA             | 540                  | 600  | 660  | ohm  |
| 700                  | 10 mA             | 630                  | 700  | 770  | ohm  |
| 800                  | 10 mA             | 720                  | 800  | 880  | ohm  |
| 1000                 | 10 mA             | 900                  | 1000 | 1100 | ohm  |
| 1200                 | 10 mA             | 1080                 | 1200 | 1320 | ohm  |
| 1400                 | 5 mA              | 1260                 | 1400 | 1540 | ohm  |
| 1600                 | 5 mA              | 1440                 | 1600 | 1760 | ohm  |
| 1900                 | 5 mA              | 1710                 | 1900 | 2090 | ohm  |
| 4000                 | 5 mA              | 3600                 | 4000 | 4400 | ohm  |
| 4300                 | 5 mA              | 3870                 | 4300 | 4730 | ohm  |
| 4600                 | 5 mA              | 4140                 | 4600 | 5060 | ohm  |

