



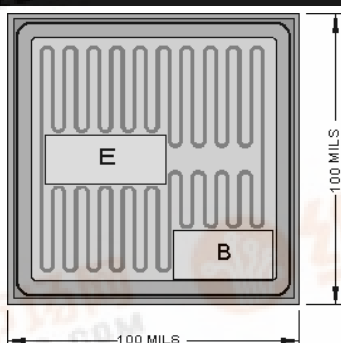
Data Sheet No. 2C5004

Chip Type **2C5004**

Geometry 9202

Polarity NPN

Generic Packaged Parts:

2N5002, 2N5004

Chip type **2C5004** by Semicoa Semiconductors provides performance similar to these devices.

Part Numbers:

2N5002, 2N5004

Product Summary:

APPLICATIONS: Designed for medium power amplifier and switching and wide band amplifier applications.

Features:

- Medium power ratings

Mechanical Specifications

| | | |
|------------------|---------------------|-------------------|
| Metallization | Top | Al - 37.5 kÅ min. |
| | Backside | Au - 6.5 kÅ nom. |
| Bonding Pad Size | Emitter | 12 mils x 40 mils |
| | Base | 12 mils x 30 mils |
| Die Thickness | 8 mils nominal | |
| Chip Area | 100 mils x 100 mils | |
| Top Surface | Silox Passivated | |

Electrical Characteristics

 $T_A = 25^\circ\text{C}$

| Parameter | Test conditions | Min | Max | Unit |
|------------|--|-----|-----|---------------|
| BV_{CBO} | $I_C = 10\text{ mA}, I_E = 0$ | 80 | --- | V dc |
| I_{CEO} | $V_{CE} = 40\text{ Vc}, I_B = 0$ | --- | 50 | μA |
| I_{CES} | $V_{CE} = 100\text{ Vc}, V_{BE} = 0$ | --- | 1.0 | mA |
| I_{EBO} | $V_{EB} = 5.5\text{ Vc}, I_C = 0$ | --- | 1.0 | mA |
| h_{FE} | $I_C = 50\text{ mA dc}, V_{CE} = 5.0\text{ V}$ | 50 | --- | --- |

Due to limitations of probe testing, only dc parameters are tested. This must be done with pulse width less

