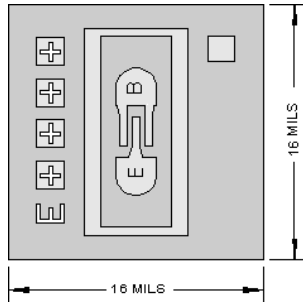


Chip Type 2C3960
Geometry 0003
Polarity NPN

Generic Packaged Part:
2N3960



[Request Quotation](#)

Chip type **2C3960** by Semicoa Semiconductors provides performance similar to these devices.

Part Numbers:

2N3960, 2N3960UB, SD3960F, SQ3960, SQ3960F

Product Summary:

APPLICATIONS:

Designed for high-speed current-mode logic switching.

Features:

| Mechanical Specifications | | |
|---------------------------|-------------------|---------------------|
| Metallization | Top | Al - 15 kÅ min. |
| | Backside | Au - 6.5 kÅ nom. |
| Bonding Pad Size | Emitter | 2.7 mils x 2.7 mils |
| | Base | 2.7 mils x 2.7 mils |
| Die Thickness | 8 mils nominal | |
| Chip Area | 16 mils x 16 mils | |
| Top Surface | Silox Passivated | |

| Electrical Characteristics | | | | |
|----------------------------|---|-----|-----|------|
| $T_A = 25^\circ\text{C}$ | | | | |
| Parameter | Test conditions | Min | Max | Unit |
| BV_{CEO} | $I_C = 10.0 \text{ mA}$ | 12 | --- | V dc |
| BV_{CBO} | $I_C = 10 \mu\text{A}$ | 20 | --- | V dc |
| BV_{EBO} | $I_E = 10.0 \text{ mA}$ | 4.5 | --- | V dc |
| I_{CEX} | $V_{CE} = 10 \text{ V}, V_{EB} = 2.0 \text{ V}$ | --- | 5.0 | nA |
| h_{FE1} | $I_C = 1.0 \text{ mA dc}, V_{CE} = 1.0 \text{ V}$ | 25 | --- | --- |
| h_{FE2} | $I_C = 10 \text{ mA dc}, V_{CE} = 1.0 \text{ V}$ | 40 | 400 | --- |
| h_{FE3} | $I_C = 30 \text{ mA dc}, V_{CE} = 1.0 \text{ V}$ | 25 | --- | --- |
| $V_{CE(sat)}$ | $I_C = 30 \text{ mA dc}, I_B = 3.0 \text{ mA}$ | --- | 0.3 | V dc |

Due to limitations of probe testing, only dc parameters are tested. This must be done with pulse width less than 300 μs , duty cycle less than 2%.