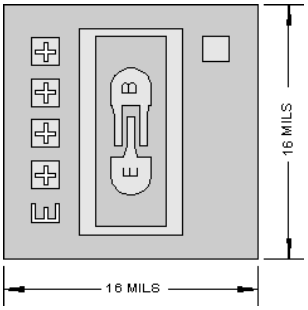
SEMICOA
SEMICONDUCTORS

Data Sheet No. 2C3960

Chip Type 2C3960
Geometry 0003
Polarity NPN

Generic Packaged Part:

2N3960



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

$T_A = 25^oC$

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