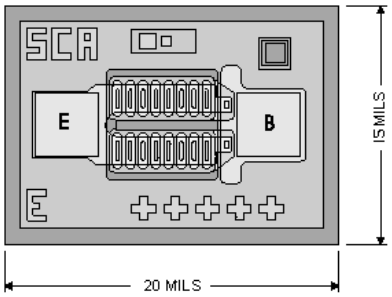
SEMICOA SEMICONDUCTORS

Data Sheet No. 2C5109

Chip Type 2C5109
Geometry 1007
Polarity NPN

Generic Packaged Parts:

2N5109



Request Quotation

Chip type **2C5109** by Semicoa Semiconductors provides performance similar to these devices.

Part Numbers:

2N5109, 2N5109UB, SD5109, SD5109F, SQ5109, SQ5109F

Product Summary:

APPLICATIONS:

Designed for broadband applications. Usable as high frequency current mode switch to 200 mA.

Features: **Special Characteristics**

ft = 1200 MHz (typ) at 50 mA/15V

Mechanical Specifications

Metallization	Top	Al - 15 kÅ min.
	Backside	Au - 6.5 kÅ nom.
Bonding Pad Size	Emitter	3.4 mils x 3.0 mils
	Base	3.4 mils x 3.0 mils
Die Thickness	8 mils nominal	
Chip Area	15 mils x 20 mils	
Top Surface	Silox Passivated	

Electrical Characteristics
$T_A = 25^oC$

Parameter	Test conditions	Min	Max	Unit
BV_{CER}	I_C = 5.0 mA, R_{BE} = 10 Ohms	40	---	V dc
BV_{CEO}	I_C = 5.0 mA	20	---	V dc
I_{CEO}	V_{CE} = 15 V dc	---	20	µA
I_{EBO}	V_{BE} = 3.0 V dc	---	100	µA
h_{FE1}	I_C = 360 mA, V_{CE} = 3.0 V dc	5.0	---	---
h_{FE2}	I_C = 50 mA, V_{CE} = 15 V dc	40	120	---

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%.