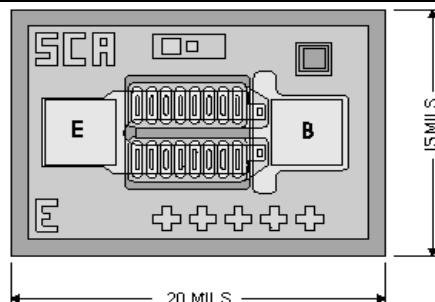


Chip Type 2C3866A
Geometry 1007
Polarity NPN

Generic Packaged Parts:
2N3866, 2N3866A



Chip type **2C3866A** by Semicoa Semiconductors provides performance similar to these devices.

Part Numbers:

[2N3866A](#), 2N3866, 2N3866AUB, SD3866A, SD3866AF, SQ3866A, SQ3866AF

Product Summary:

APPLICATIONS: Designed for amplifier, frequency multiplier and oscillator applications. Suitable for output, driver and predriver stages in VHF and UHF equipment.

Features: Special Characteristics:

$f_t = 950 \text{ MHz}$ (type) 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

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

Parameter	Test conditions	Min	Max	Unit
BV_{CEO}	$I_C = 5.0 \text{ mA}$	30	---	V dc
BV_{CBO}	$I_C = 100 \mu\text{A}$	55	---	V dc
BV_{CER}	$I_C = 5.0 \text{ mA}$, $R_{BE} = 10 \text{ Ohms}$	55	---	V dc
BV_{EBO}	$I_E = 100 \mu\text{A}$	3.5	---	V dc
I_{CEO}	$V_{CE} = 28 \text{ V}$, $V_{EB} = 2.0 \text{ V}$	---	20	μA
h_{FE1}	$I_C = 360 \text{ mA dc}$, $V_{CE} = 5.0 \text{ V}$	5.0	---	---
h_{FE2}	$I_C = 50 \text{ mA dc}$, $V_{CE} = 5.0 \text{ V}$	10	200	---

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%.