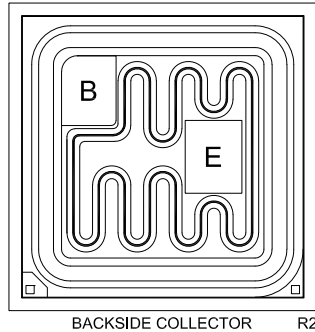


# CP591X-2N2907A

## PNP - General Purpose Transistor Die

### 0.6 Amp, 60 Volt

The CP591X-2N2907A is a silicon PNP transistor designed for general purpose applications.



#### MECHANICAL SPECIFICATIONS:

Die Size	19.3 x 19.3 MILS
Die Thickness	5.9 MILS
Base Bonding Pad Size	3.5 x 4.3 MILS
Emitter Bonding Pad Size	3.5 x 4.5 MILS
Top Side Metalization	Al – 13,000Å
Back Side Metalization	Au – 9,000Å
Scribe Alley Width	1.75 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	45,900

#### MAXIMUM RATINGS: (T<sub>A</sub>=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V <sub>CB0</sub>	60	V
Collector-Emitter Voltage	V <sub>CEO</sub>	60	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	V
Continuous Collector Current	I <sub>C</sub>	600	mA
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C

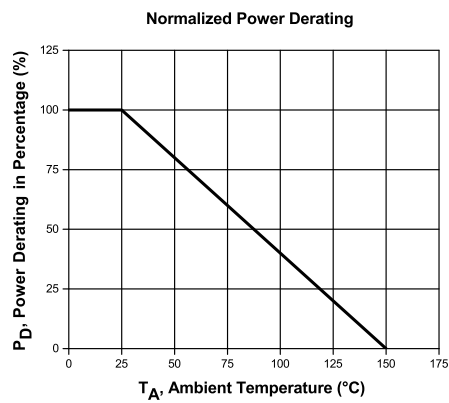
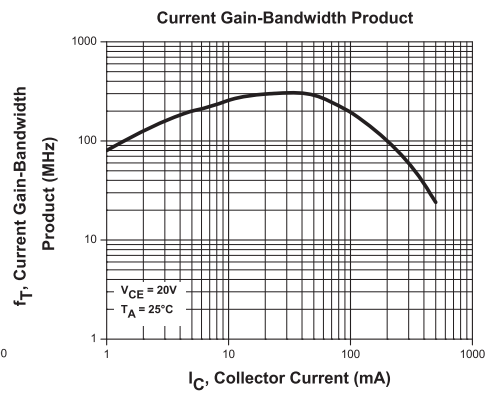
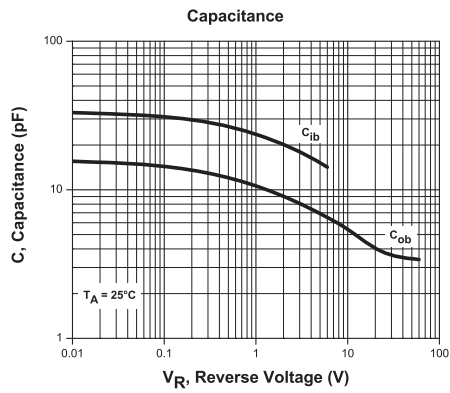
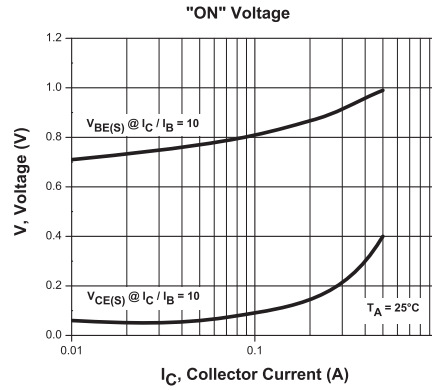
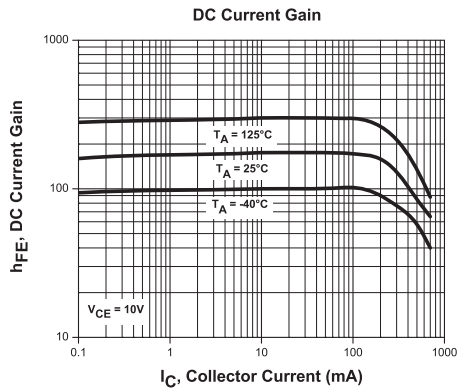
#### ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =50V		10	nA
I <sub>CEV</sub>	V <sub>CE</sub> =30V, V <sub>EB</sub> =0.5V		50	nA
BV <sub>CB0</sub>	I <sub>C</sub> =10μA	60		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA	60		V
BV <sub>EBO</sub>	I <sub>E</sub> =10μA	5.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.4	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		1.6	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		1.3	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		2.6	V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.1mA	75		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0mA	100		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	100		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =150mA	100	300	
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =500mA	50		
f <sub>T</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =50mA, f=100MHz	200		MHz
C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz		8.0	pF
C <sub>ib</sub>	V <sub>EB</sub> =2.0V, I <sub>C</sub> =0, f=1.0MHz		30	pF
t <sub>on</sub>	V <sub>CC</sub> =30V, I <sub>C</sub> =150mA, I <sub>B1</sub> =15mA		45	ns
t <sub>off</sub>	V <sub>CC</sub> =6.0V, I <sub>C</sub> =150mA, I <sub>B1</sub> =I <sub>B2</sub> =15mA		100	ns

R2 (25-April 2017)

# CP591X-2N2907A

## Typical Electrical Characteristics



## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### CONTACT US

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