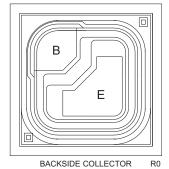


# **CP788X-2N5087** PNP - General Purpose Transistor Die

The CP788X-2N5087 is a silicon PNP transistor designed for general purpose applications.



**MECHANICAL SPECIFICATIONS:** 

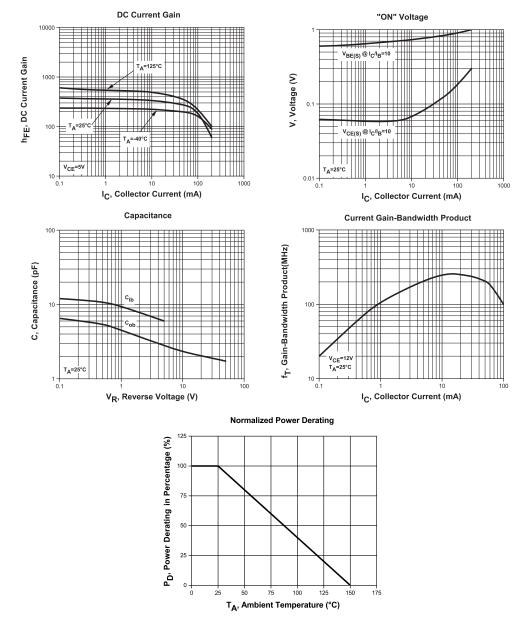
Die Size	13.7 x 13.7 MILS	
Die Thickness	5.9 MILS	
Base Bonding Pad Size	4.0 x 4.0 MILS	
Emitter Bonding Pad Size	5.5 x 5.5 MILS	
Top Side Metalization	Al-Si – 17,000Å	
Back Side Metalization	Au – 9,000Å	
Scribe Alley Width	1.8 MILS	
Wafer Diameter	5 INCHES	
Gross Die Per Wafer	91,469	

	RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Collector-Bas	se Voltage	V <sub>CBO</sub>	50	V
Collector-Emitter Voltage		V <sub>CEO</sub>	50	V
Emitter-Base Voltage		V <sub>EBO</sub>	3.0	V
Continuous Collector Current		۱C	50	mA
Operating and Storage Junction Temperature		T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
	L CHARACTERISTICS: (T <sub>A</sub> =25°C)			
SYMBOL		MIN	<b>MAX</b> 50	UNITS nA
ICBO	V <sub>CB</sub> =35V			
IEBO	V <sub>EB</sub> =3.0V		50	nA
BV <sub>CBO</sub>	Ι <sub>C</sub> =100μΑ	50		V
BVCEO	I <sub>C</sub> =1.0mA	50		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA		0.30	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0mA		0.85	V
hFE	V <sub>CE</sub> =5.0V, I <sub>C</sub> =100µA	250	800	
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0mA	250		
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =10mA	250		
fT	V <sub>CE</sub> =5.0V, I <sub>C</sub> =500µA, f=20MHz	40		MHz
Cob	V <sub>CB</sub> =5.0V, I <sub>E</sub> =0, f=100kHz		4.0	pF

R1 (23-August 2016)

# **CP788X-2N5087** Typical Electrical Characteristics

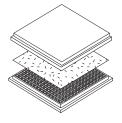




R1 (23-August 2016)

## BARE DIE PACKING OPTIONS



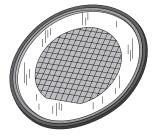


## BARE DIE IN TRAY (WAFFLE) PACK

- CT: Singulated die in tray (waffle) pack. (example: CP211-PART NUMBER-CT)
- CM: Singulated die in tray (waffle) pack 100% visually inspected as per MIL-STD-750, (method 2072 transistors, method 2073 diodes). (example: CP211-<u>PART NUMBER</u>-CM)

## **UNSAWN WAFER**

WN: Full wafer, unsawn, 100% tested with reject die inked. (example: CP211-PART NUMBER-WN)



## SAWN WAFER ON PLASTIC RING

WR: Full wafer, sawn and mounted on plastic ring, 100% tested with reject die inked. (example: CP211-PART NUMBER-WR)

Please note: Sawn Wafer on Metal Frame (WS) is possible as a special order. Please contact your Central Sales Representative at 631-435-1110.



Visit the Central website for a complete listing of specifications: www.centralsemi.com/bdspecs

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES

#### 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

#### DESIGNER SUPPORT/SERVICES

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

- Free guick 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

· Custom product packing

Custom bar coding for shipments

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- · Custom product and package development

### REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

### CONTACT US

### **Corporate Headquarters & Customer Support Team**

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