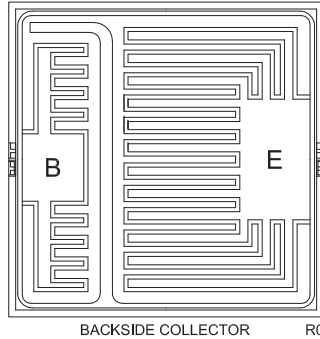


CP527-TIP147

PNP - Darlington Transistor Die

8.0 Amp, 100 Volt

The CP527-TIP147 is a silicon PNP Darlington power transistor designed for high gain amplifier applications.



MECHANICAL SPECIFICATIONS:

Die Size	110 x 110 MILS
Die Thickness	10.6 MILS
Base Bonding Pad Size	21 x 24 MILS
Emitter Bonding Pad Size	24 x 42 MILS
Top Side Metalization	Al - 20,000Å
Back Side Metalization	Ni/Ag - 2,000Å/10,000Å
Scribe Alley Width	4.3 mils
Wafer Diameter	4 INCHES
Gross Die Per Wafer	875

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	100	V
Collector-Emitter Voltage	V _{CEO}	100	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Continuous Collector Current	I _C	10	A
Peak Collector Current	I _{CM}	15	A
Continuous Base Current	I _B	500	mA
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C

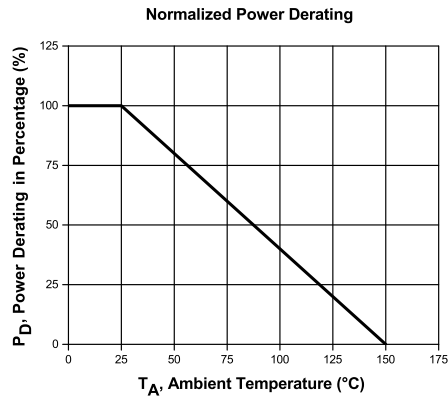
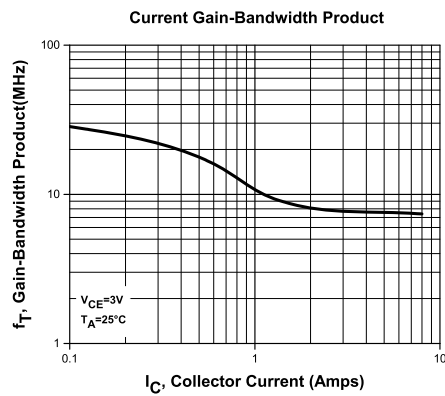
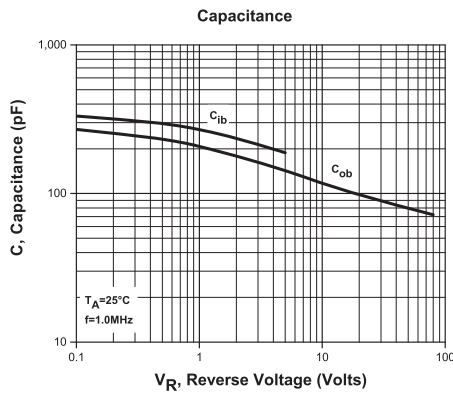
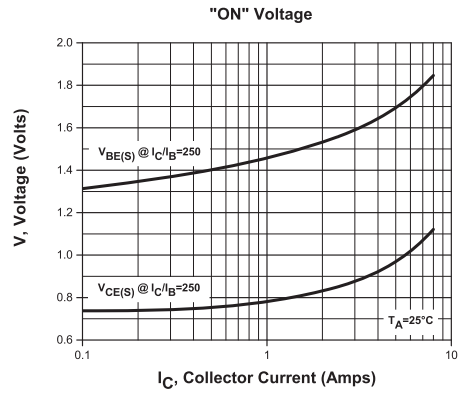
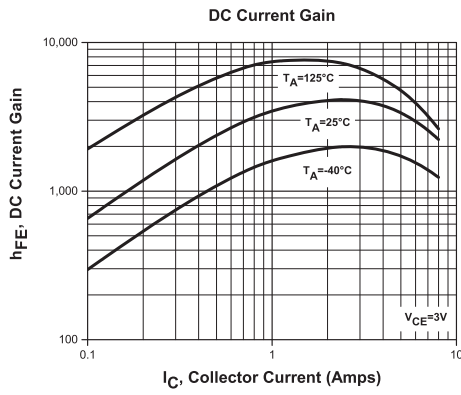
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{CBO}	V _{CB} =100V			1.0	mA
I _{CEO}	V _{CE} =50V			2.0	mA
I _{EBO}	V _{EB} =5.0V			2.0	mA
BV _{CEO}	I _C =30mA	100			V
V _{CE(SAT)}	I _C =5.0A, I _B =10mA			2.0	V
V _{CE(SAT)}	I _C =10A, I _B =40mA			3.0	V
V _{BE(SAT)}	I _C =10A, I _B =40mA			3.5	V
V _{BE(ON)}	V _{CE} =4.0V, I _C =10A			3.0	V
V _F	I _F =10A			2.8	V
h _{FE}	V _{CE} =4.0V, I _C =5.0A	1.0K			
h _{FE}	V _{CE} =4.0V, I _C =10A	500			
t _d	V _{CC} =30V, I _C =5.0A, I _{B1} =1B ₂ =20mA		0.15		µs
t _r	V _{CC} =30V, I _C =5.0A, I _{B1} =1B ₂ =20mA		0.55		µs
t _s	V _{CC} =30V, I _C =5.0A, I _{B1} =1B ₂ =20mA		2.5		µs
t _f	V _{CC} =30V, I _C =5.0A, I _{B1} =1B ₂ =20mA		2.5		µs

R0 (28-June 2016)

CP527-TIP147

Typical Electrical Characteristics



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-PART NUMBER-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.centrasemi.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
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 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

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms