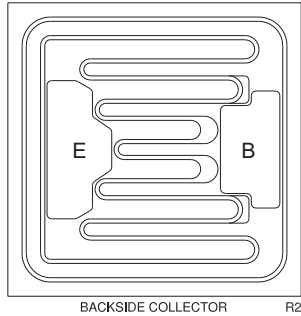


CP705V
PNP - High Current Transistor Die
1.0 Amp, 80 Volt

The CP705V is a silicon PNP transistor designed for high current, general purpose amplifier applications.



MECHANICAL SPECIFICATIONS:

| | |
|--------------------------|-----------------|
| Die Size | 31 x 31 MILS |
| Die Thickness | 7.1 MILS |
| Base Bonding Pad Area | 5.9 x 11.8 MILS |
| Emitter Bonding Pad Area | 6.5 x 13.8 MILS |
| Top Side Metalization | Al – 30,000Å |
| Back Side Metalization | Au – 9,000Å |
| Scribe Alley Width | 1.96 MILS |
| Wafer Diameter | 5 INCHES |
| Gross Die Per Wafer | 17,534 |

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

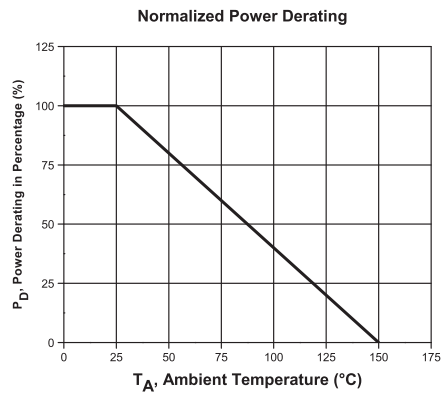
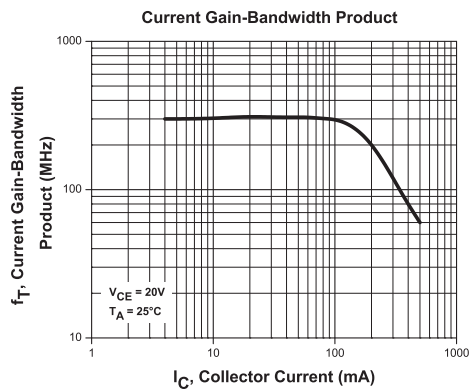
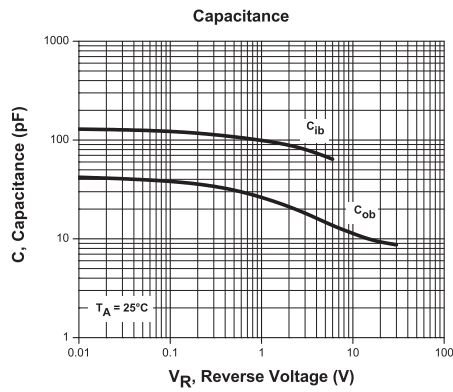
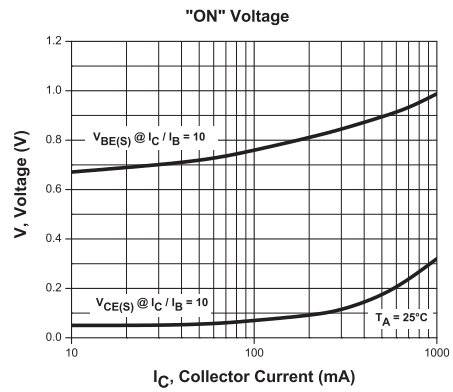
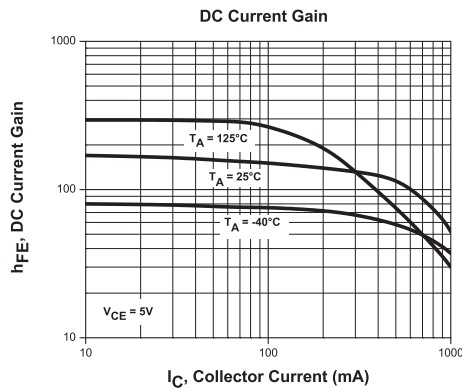
| | SYMBOL | | UNITS |
|--|----------------|-------------|------------------|
| Collector-Base Voltage | V_{CBO} | 80 | V |
| Collector-Emitter Voltage | V_{CEO} | 80 | V |
| Emitter-Base Voltage | V_{EBO} | 5.0 | V |
| Continuous Collector Current | I_C | 1.0 | A |
| Operating and Storage Junction Temperature | T_J, T_{stg} | -65 to +150 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | MAX | UNITS |
|---------------|---|-----|------|-------|
| I_{CBO} | $V_{CB}=60\text{V}$ | | 500 | nA |
| I_{EBO} | $V_{EB}=5.0\text{V}$ | | 500 | nA |
| BV_{CBO} | $I_C=10\mu\text{A}$ | 80 | | V |
| BV_{CEO} | $I_C=10\text{mA}$ | 80 | | V |
| BV_{EBO} | $I_E=10\mu\text{A}$ | 5.0 | | V |
| $V_{CE(SAT)}$ | $I_C=500\text{mA}, I_B=50\text{mA}$ | | 0.50 | V |
| $V_{BE(SAT)}$ | $I_C=500\text{mA}, I_B=50\text{mA}$ | | 1.10 | V |
| h_{FE} | $V_{CE}=5.0\text{V}, I_C=100\text{mA}$ | 100 | 700 | |
| f_T | $V_{CE}=10\text{V}, I_C=50\text{mA}, f=1.0\text{MHz}$ | 100 | | MHz |
| C_{ob} | $V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$ | | 20 | pF |
| C_{ib} | $V_{EB}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$ | | 110 | pF |

CP705V

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

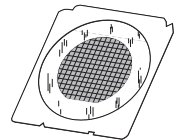
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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

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