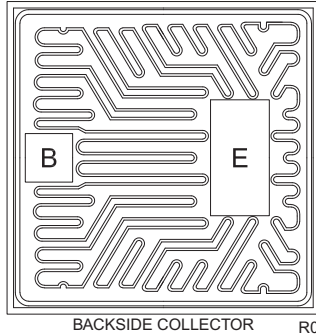


CP763V-CZT955

PNP - High Current Transistor Die

4.0 Amp, 140 Volt

The CP763V-CZT955 die is a silicon PNP transistor designed for high voltage and high current applications.



MECHANICAL SPECIFICATIONS:

Die Size	48.8 x 48.8 MILS
Die Thickness	7.1 MILS
Base Bonding Pad Size	7.9 x 7.9 MILS
Emitter Bonding Pad Size	9.1 x 18.1 MILS
Top Side Metalization	Al - 30,000Å
Back Side Metalization	Ti/Ni/Ag - 2,000Å/3,000Å/20,000Å
Scribe Alley Width	1.97 mils
Wafer Diameter	5 INCHES
Gross Die Per Wafer	7,100

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

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	180	V
Collector-Emitter Voltage	V_{CEO}	140	V
Emitter-Base Voltage	V_{EBO}	7.0	V
Continuous Collector Current	I_C	4.0	A
Peak Collector Current	I_{CM}	10	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$

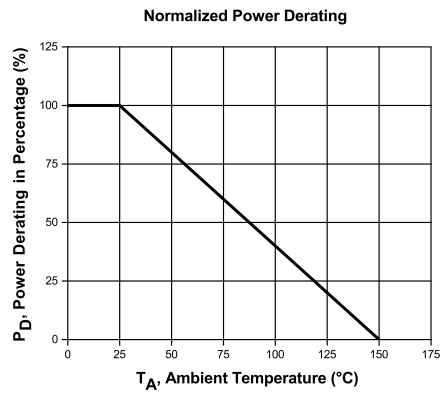
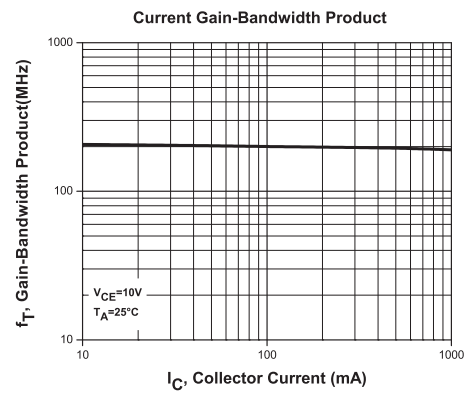
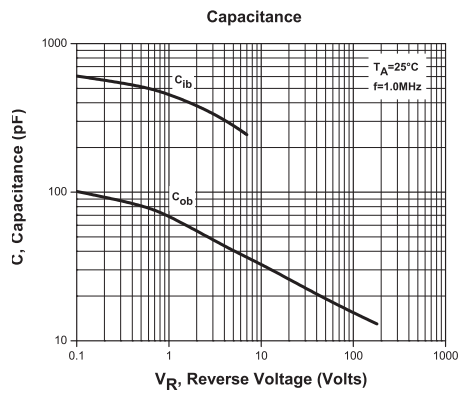
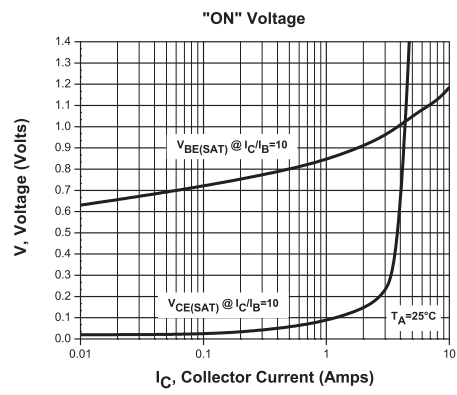
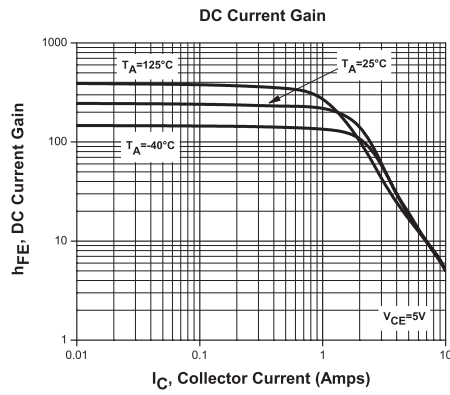
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{CBO}	$V_{CB}=150\text{V}$			20	nA
I_{CBO}	$V_{CB}=150\text{V}, T_A=100^\circ\text{C}$			0.5	μA
I_{CER}	$V_{CE}=150\text{V}, R_{BE}\leq 1.0\text{k}\Omega$			20	nA
I_{EBO}	$V_{EB}=6.0\text{V}$			10	nA
BV_{CBO}	$I_C=100\mu\text{A}$	180	200		V
BV_{CER}	$I_C=1.0\mu\text{A}, R_{BE}\leq 1.0\text{k}\Omega$	180	200		V
BV_{CEO}	$I_C=10\text{mA}$	140	160		V
BV_{EBO}	$I_E=100\mu\text{A}$	7.0	8.0		V
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=5.0\text{mA}$		40	60	mV
$V_{CE(SAT)}$	$I_C=0.5\text{A}, I_B=50\text{mA}$		55	80	mV
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$		85	120	mV
$V_{CE(SAT)}$	$I_C=3.0\text{A}, I_B=300\text{mA}$		210	360	mV
$V_{BE(SAT)}$	$I_C=3.0\text{A}, I_B=300\text{mA}$		0.96	1.04	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=3.0\text{A}$		830	930	mV
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	100	250		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{A}$	100	220	300	
h_{FE}	$V_{CE}=5.0\text{V}, I_C=3.0\text{A}$	35			
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\text{A}$		5.0		
f_T	$V_{CE}=10\text{V}, I_C=100\text{mA}, f=50\text{MHz}$		200		MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		33		pF
t_{on}	$V_{CC}=50\text{V}, I_C=1.0\text{A}, I_{B1}=I_{B2}=0.1\text{A}$		25		ns
t_{off}	$V_{CC}=50\text{V}, I_C=1.0\text{A}, I_{B1}=I_{B2}=0.1\text{A}$		410		ns

R0 (29-October 2015)

CP763V-CZT955

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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