

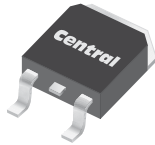
CJD200 NPN
CJD210 PNP

**SURFACE MOUNT
COMPLEMENTARY SILICON
POWER TRANSISTORS**



www.centrasemi.com

**DPAK
POWER!**



DPAK TRANSISTOR CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CJD200, CJD210 types are Complementary Silicon Power Transistors manufactured in a surface mount package designed for high current amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CB0}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	8.0	V
Continuous Collector Current	I_C	5.0	A
Peak Collector Current	I_{CM}	10	A
Continuous Base Current	I_B	1.0	A
Power Dissipation	P_D	12.5	W
Power Dissipation ($T_A=25^\circ\text{C}$)	P_D	1.4	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JC}	10	$^\circ\text{C/W}$
Thermal Resistance	θ_{JA}	89.3	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CB0}	$V_{CB}=40\text{V}$		100	nA
I_{CB0}	$V_{CB}=40\text{V}, T_C=125^\circ\text{C}$		100	μA
I_{EBO}	$V_{EB}=8.0\text{V}$		100	nA
BV_{CEO}	$I_C=10\text{mA}$	25		V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.3	V
$V_{CE(SAT)}$	$I_C=2.0\text{A}, I_B=200\text{mA}$		0.75	V
$V_{CE(SAT)}$	$I_C=5.0\text{A}, I_B=1.0\text{A}$		1.8	V
$V_{BE(SAT)}$	$I_C=5.0\text{A}, I_B=1.0\text{A}$		2.5	V
$V_{BE(ON)}$	$V_{CE}=1.0\text{V}, I_C=2.0\text{A}$		1.6	V
h_{FE}	$V_{CE}=1.0\text{V}, I_C=500\text{mA}$	70		
h_{FE}	$V_{CE}=1.0\text{V}, I_C=2.0\text{A}$	45	180	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=5.0\text{A}$	10		
f_T	$V_{CE}=10\text{V}, I_C=100\text{mA}, f=10\text{MHz}$	65		MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=0.1\text{MHz}$ (CJD200)		80	pF
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=0.1\text{MHz}$ (CJD210)		120	pF

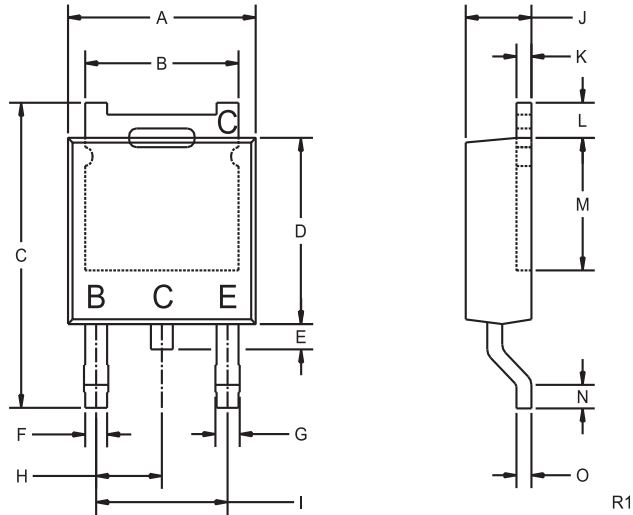
R2 (4-January 2010)

CJD200 NPN
CJD210 PNP



**SURFACE MOUNT
COMPLEMENTARY SILICON
POWER TRANSISTORS**

DPAK TRANSISTOR CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.250	0.265	6.35	6.73
B	0.205	0.215	5.21	5.46
C	0.374	0.409	9.50	10.40
D	0.235	0.245	5.97	6.22
E	0.025	0.040	0.64	1.02
F	0.025	0.035	0.64	0.88
G	0.030	0.045	0.76	1.14
H	0.090		2.28	
I	0.180		4.57	
J	0.086	0.094	2.19	2.38
K	0.018	0.023	0.46	0.58
L	0.040	0.050	1.02	1.27
M	0.170	-	4.32	-
N	0.020	-	0.51	-
O	0.018	0.023	0.46	0.58

LEAD CODE:
B) BASE
C) COLLECTOR
E) EMITTER
C) COLLECTOR

MARKING:
FULL PART NUMBER

DPAK TRANSISTOR (REV: R1)

R2 (4-January 2010)