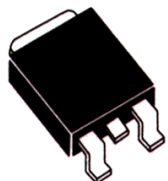




CJD200 NPN
CJD210 PNP

COMPLEMENTARY SILICON
POWER TRANSISTOR

DPAK POWER!TM



DPAK CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

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

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

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	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
Base Current	I_B	1.0	A
Power Dissipation ($T_C=25^{\circ}\text{C}$)	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	$^{\circ}\text{C}/\text{W}$
Thermal Resistance	θ_{JA}	89.3	$^{\circ}\text{C}/\text{W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=40\text{V}$		100	nA
I_{CBO}	$V_{CB}=40\text{V}, T_C=125^{\circ}\text{C}$		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		

