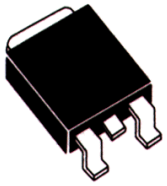
NEW

CJD200 NPN
CJD210 PNP

COMPLEMENTARY SILICON POWER TRANSISTOR

DPAK POWER!™



DPAK CASE

Central™ 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°C)

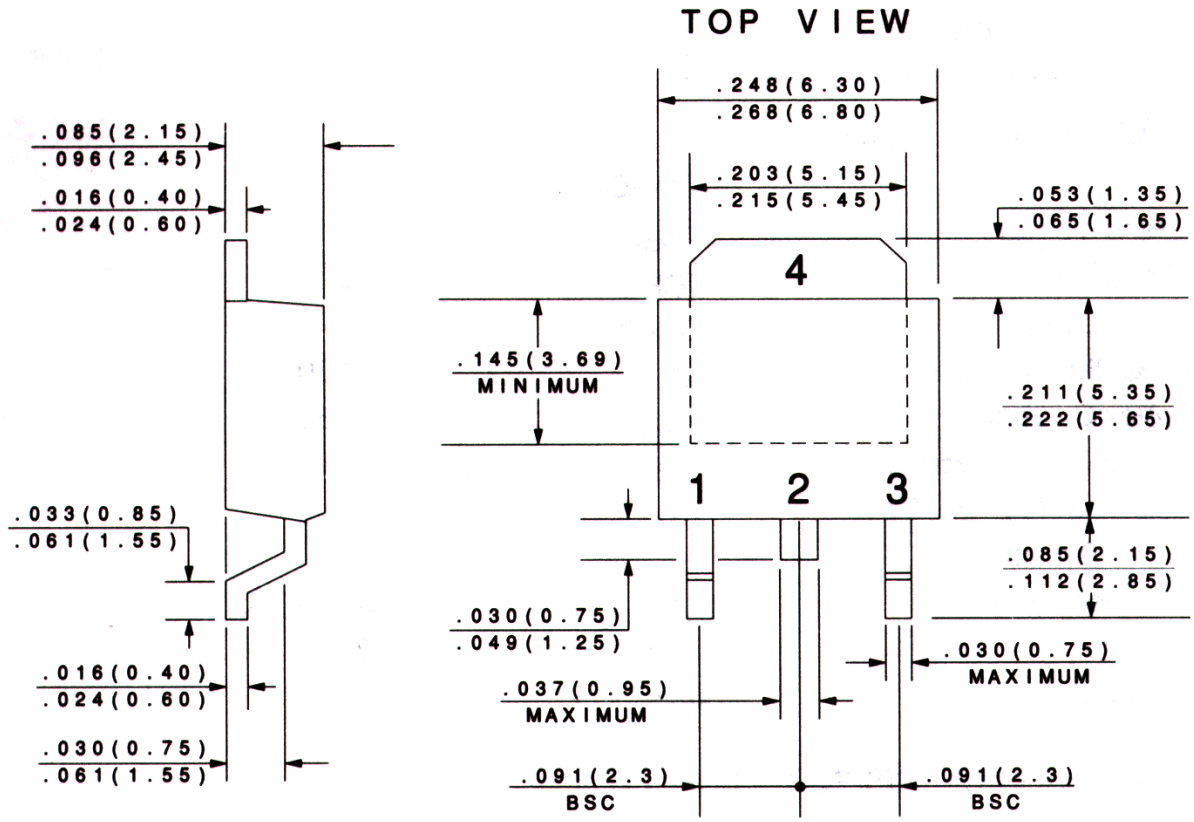
	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	8.0	V
Continuous Collector Current	I_C	5.0	A
Peak Collector Current	I_{CM}	10	A
Base Current	I_B	1.0	A
Power Dissipation (T_C=25°C)	P_D	12.5	W
Power Dissipation (T_A=25°C)	P_D	1.4	W
Operating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

ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	V_{CB}=40V		100	nA
I_{CBO}	V_{CB}=40V, T_C=125°C		100	µA
I_{EBO}	V_{EB}=8.0V		100	nA
BV_{CEO}	I_C=10mA	25		V
$V_{CE(SAT)}$	I_C=500mA, I_B=50mA		0.3	V
$V_{CE(SAT)}$	I_C=2.0A, I_B=200mA		0.75	V
$V_{CE(SAT)}$	I_C=5.0A, I_B=1.0A		1.8	V
$V_{BE(SAT)}$	I_C=5.0A, I_B=1.0A		2.5	V
$V_{BE(ON)}$	V_{CE}=1.0V, I_C=2.0A		1.6	V
h_{FE}	V_{CE}=1.0V, I_C=500mA	70		

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
h_{FE}	V_{CE}=1.0V, I_C=2.0A	45	180	
h_{FE}	V_{CE}=2.0V, I_C=5.0A	10		
f_T	V_{CE}=10V, I_C=100mA, f=10MHz	65		MHz
C_{ob}	V_{CB}=10V, I_E=0, f=0.1MHz (CJD200)		80	pF
C_{ob}	V_{CB}=10V, I_E=0, f=0.1MHz (CJD210)		120	pF

All dimensions in inches (mm).



LEAD CODE:

1) BASE
2) COLLECTOR
3) EMITTER
4) COLLECTOR