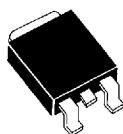




CJD31C NPN
CJD32C PNP

COMPLEMENTARY SILICON
POWER TRANSISTOR

DPAKTM
POWER!



DPAK CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CJD31C, CJD32C types are Complementary Silicon Power Transistors manufactured by the epitaxial base process, mounted in a surface mount package designed for power amplifier and high speed switching applications.

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

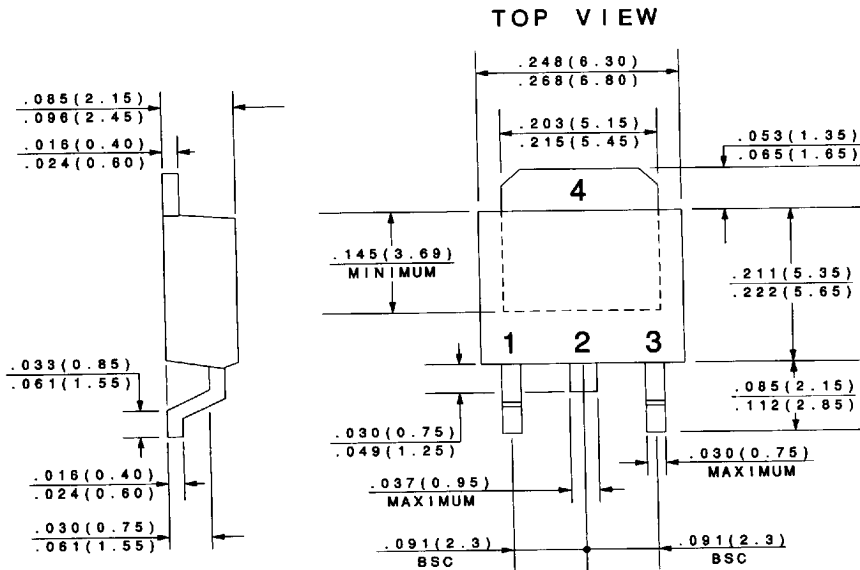
	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	3.0	A
Peak Collector Current	I_{CM}	5.0	A
Base Current	I_B	1.0	A
Power Dissipation ($T_C=25^\circ\text{C}$)	P_D	15	W
Power Dissipation ($T_A=25^\circ\text{C}$)	P_D	1.56	W
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JC}	8.33	$^\circ\text{C/W}$
Thermal Resistance	θ_{JA}	80.1	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CEO}	$V_{CE}=60\text{V}$		50	μA
I_{CES}	$V_{CE}=100\text{V}$		20	μA
I_{EBO}	$V_{EB}=5.0\text{V}$		1.0	mA
BV_{CEO}	$I_C=30\text{mA}$	100		V
$V_{CE(SAT)}$	$I_C=3.0\text{A}, I_B=375\text{mA}$		1.2	V
$V_{BE(ON)}$	$V_{CE}=4.0\text{V}, I_C=3.0\text{A}$		1.8	V
h_{FE}	$V_{CE}=4.0\text{V}, I_C=1.0\text{A}$	25		
h_{FE}	$V_{CE}=4.0\text{V}, I_C=3.0\text{A}$	10	50	
f_T	$V_{CE}=10\text{V}, I_C=500\text{mA}, f=1.0\text{MHz}$	3.0		MHz
h_{fe}	$V_{CE}=10\text{V}, I_C=500\text{mA}, f=1.0\text{kHz}$	20		

1989963 0001731 953 80

All dimensions in inches (mm).



LEAD CODE:

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

DATA
SHEET