



CJD47  
CJD50

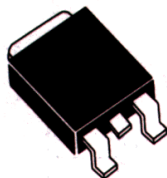
**NPN SILICON  
POWER TRANSISTOR**

**Central™  
Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CJD47, CJD50 types are NPN Silicon Power Transistors manufactured in a surface mount package designed for high voltage applications such as power supplies and other switching applications.

**DPAK POWER!™**



**DPAK CASE**

**MAXIMUM RATINGS (T<sub>C</sub>=25°C)**

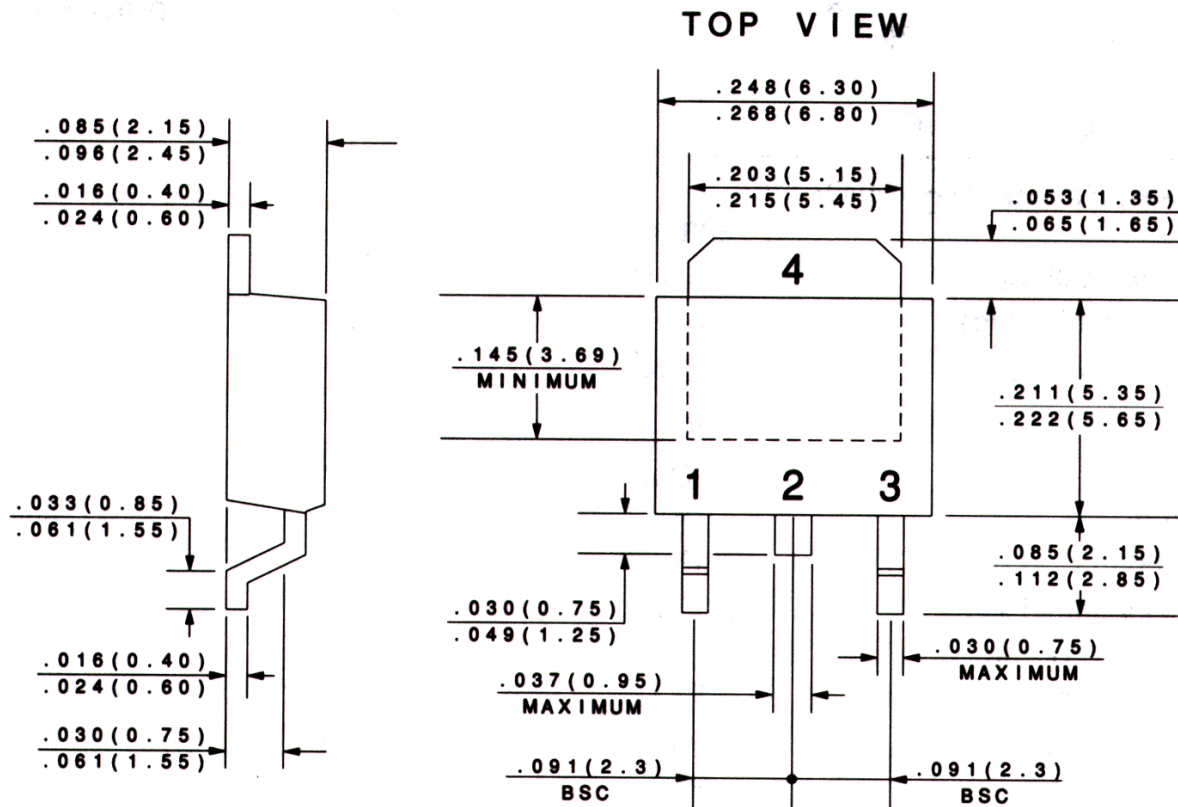
	<b>SYMBOL</b>	<b>CJD47</b>	<b>CJD50</b>	<b>UNITS</b>
Collector-Base Voltage	V <sub>CBO</sub>	350	500	V
Collector-Emitter Voltage	V <sub>CEO</sub>	250	400	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0		V
Continuous Collector Current	I <sub>C</sub>	1.0		A
Peak Collector Current	I <sub>CM</sub>	2.0		A
Base Current	I <sub>B</sub>	600		mA
Power Dissipation (T <sub>C</sub> =25°C)	P <sub>D</sub>	15		W
Power Dissipation (T <sub>A</sub> =25°C)	P <sub>D</sub>	1.56		W
Operating and Storage				
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150		°C
Thermal Resistance	θ <sub>JC</sub>	8.33		°C/W
Thermal Resistance	θ <sub>JA</sub>	80.1		°C/W

**ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C unless otherwise noted)**

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>MAX</b>	<b>UNITS</b>
I <sub>CEO</sub>	V <sub>CE</sub> =150V (CJD47)		200	μA
I <sub>CEO</sub>	V <sub>CE</sub> =300V (CJD50)		200	μA
I <sub>CES</sub>	V <sub>CE</sub> =350V (CJD47)		100	μA
I <sub>CES</sub>	V <sub>CE</sub> =500V (CJD50)		100	μA
I <sub>EBO</sub>	V <sub>EB</sub> =5.0V		1.0	mA
BV <sub>CEO</sub>	I <sub>C</sub> =30mA (CJD47)	250		V
BV <sub>CEO</sub>	I <sub>C</sub> =30mA (CJD50)	400		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.0A, I <sub>B</sub> =200mA		1.0	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0A		1.5	V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =300mA	30	150	

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$h_{FE}$	$V_{CE}=10V, I_C=1.0A$	10		
$f_T$	$V_{CE}=10V, I_C=200mA, f=2.0MHz$	10		MHz
$h_{fe}$	$V_{CE}=10V, I_C=200mA, f=1.0kHz$	25		

All dimensions in inches (mm).



LEAD CODE:

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