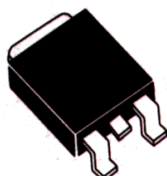




CJD47
CJD50

NPN SILICON
POWER TRANSISTOR

DPAK POWER!™



DPAK CASE

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.

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

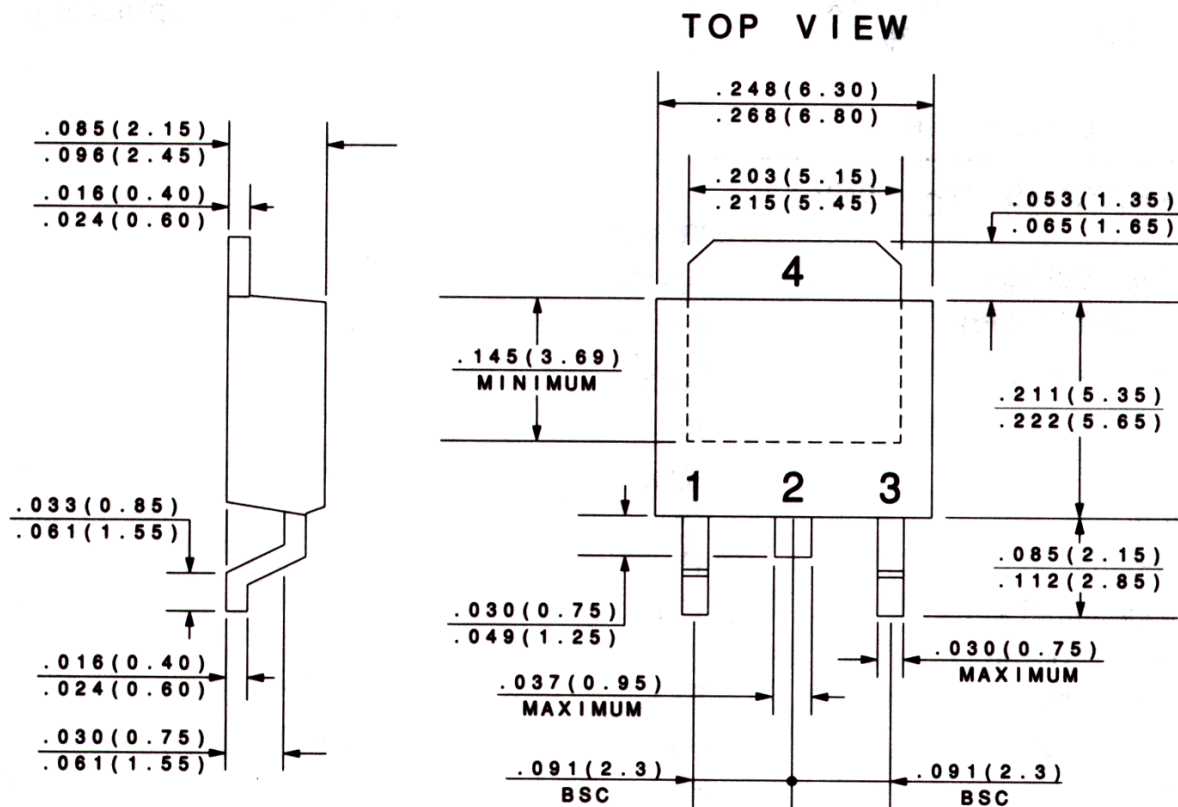
	SYMBOL	CJD47	CJD50	UNITS
Collector-Base Voltage	V_{CBO}	350	500	V
Collector-Emitter Voltage	V_{CEO}	250	400	V
Emitter-Base Voltage	V_{EBO}	5.0		V
Continuous Collector Current	I_C	1.0		A
Peak Collector Current	I_{CM}	2.0		A
Base Current	I_B	600		mA
Power Dissipation ($T_C=25^\circ\text{C}$)	P_D	15		W
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}	$V_{CE}=150\text{V}$ (CJD47)		200	μA
I_{CEO}	$V_{CE}=300\text{V}$ (CJD50)		200	μA
I_{CES}	$V_{CE}=350\text{V}$ (CJD47)		100	μA
I_{CES}	$V_{CE}=500\text{V}$ (CJD50)		100	μA
I_{EBO}	$V_{EB}=5.0\text{V}$		1.0	mA
BV_{CEO}	$I_C=30\text{mA}$ (CJD47)	250		V
BV_{CEO}	$I_C=30\text{mA}$ (CJD50)	400		V
$V_{CE(SAT)}$	$I_C=1.0\text{A}$, $I_B=200\text{mA}$		1.0	V
$V_{BE(ON)}$	$V_{CE}=10\text{V}$, $I_C=1.0\text{A}$		1.5	V
h_{FE}	$V_{CE}=10\text{V}$, $I_C=300\text{mA}$	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