

**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°C)

	SYMBOL	CJD47	CJD50	UNITS
Collector-Base Voltage	V _{CB0}	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°C)	P _D	15		W
Power Dissipation (T _A =25°C)	P _D	1.56		W
Operating and Storage				
Junction Temperature	T _J , T _{stg}	-65 to +150		°C
Thermal Resistance	θ _{JC}	8.33		°C/W
Thermal Resistance	θ _{JA}	80.1		°C/W

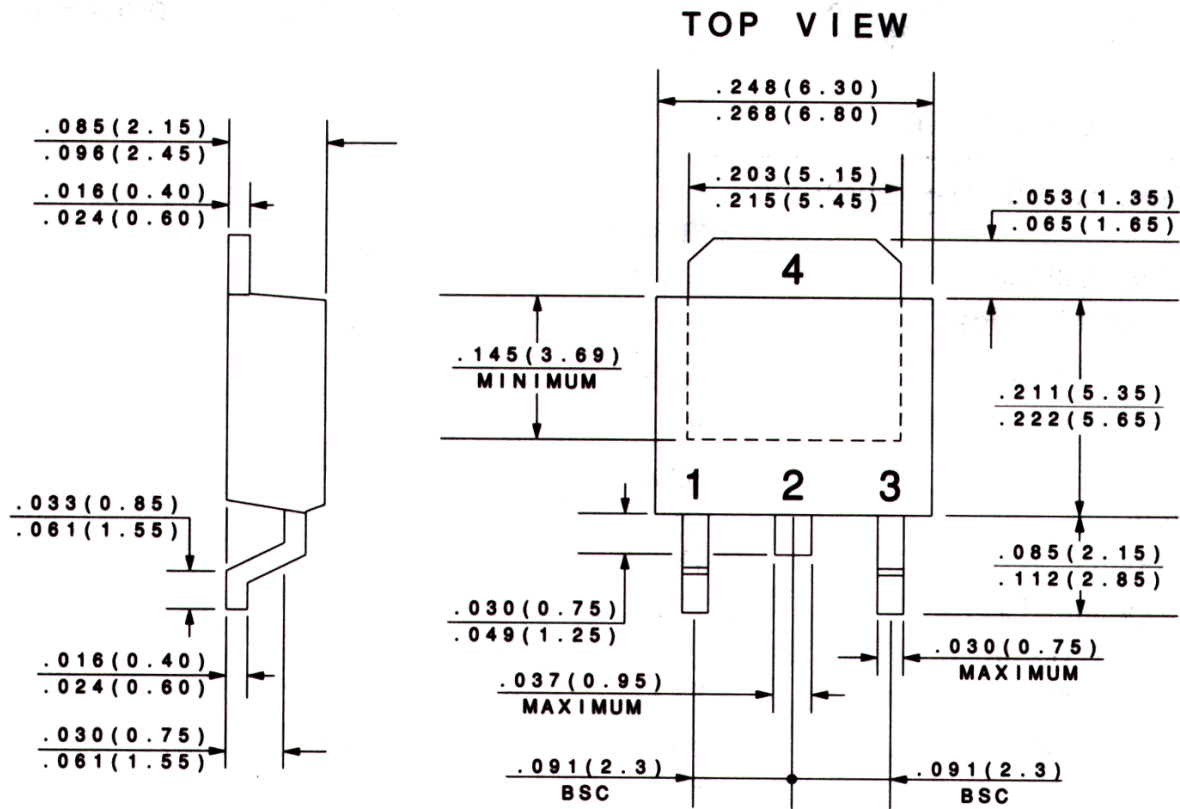
ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CEO}	V _{CE} =150V (CJD47)		200	μA
I _{CEO}	V _{CE} =300V (CJD50)		200	μA
I _{CES}	V _{CE} =350V (CJD47)		100	μA
I _{CES}	V _{CE} =500V (CJD50)		100	μA
I _{EBO}	V _{EB} =5.0V		1.0	mA
BV _{CEO}	I _C =30mA (CJD47)	250		V
BV _{CEO}	I _C =30mA (CJD50)	400		V
V _{CE(SAT)}	I _C =1.0A, I _B =200mA		1.0	V
V _{BE(ON)}	V _{CE} =10V, I _C =1.0A		1.5	V
V _{BE}	V _{CE} =10V, I _C =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