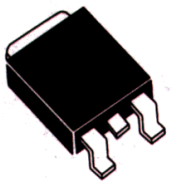
NEW

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)

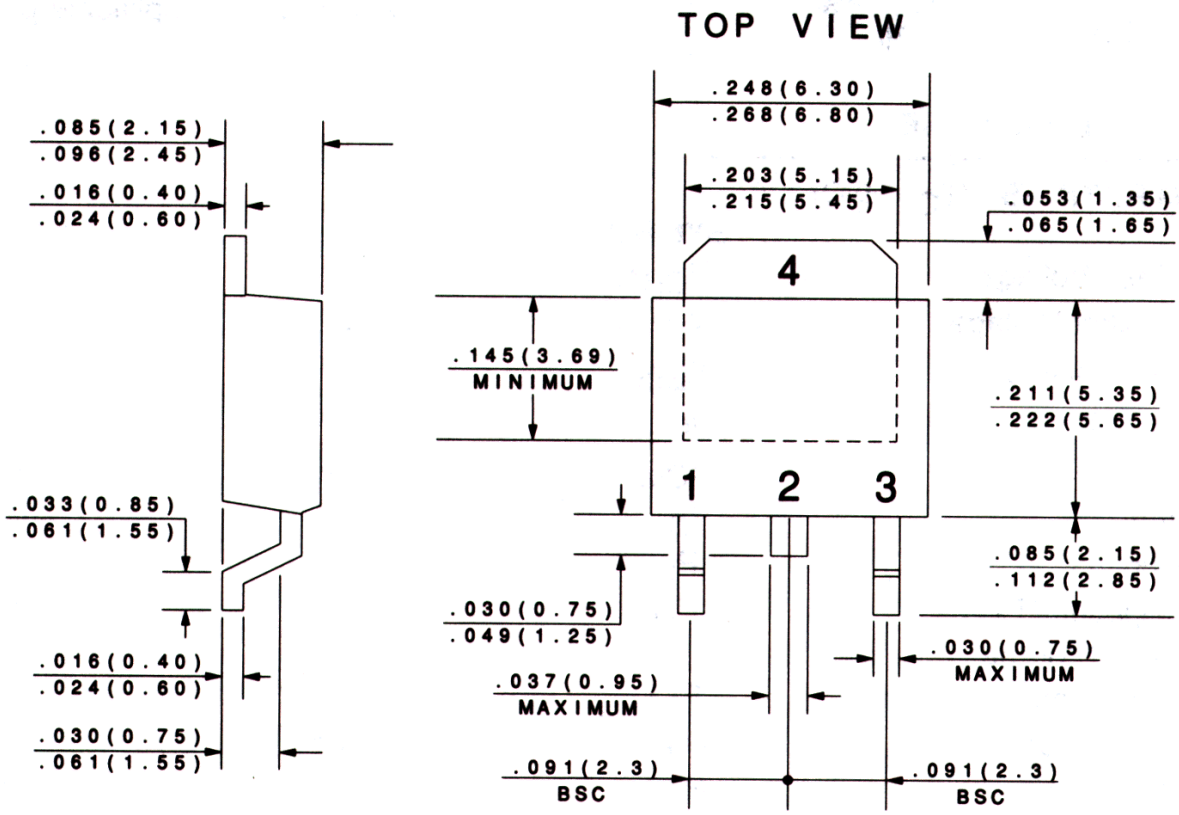
	SYMBOL	CJD47	CJD50	UNITS
Collector-Base Voltage	V_{CBO}	350	500	V
Collector-Emitter Voltage	V_{CEO}	250	400	V
Emitter-Base Voltage	V_{EBO}	5.0		V
Continuous Collector Current	I_C	1.0		A
Peak Collector Current	I_{CM}	2.0		A
Base Current	I_B	600		mA
Power Dissipation (T_C=25°C)	P_D	15		W
Power Dissipation (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
h_{FE}	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