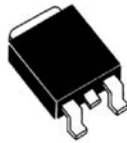


CJD112 NPN
CJD117 PNP

COMPLEMENTARY SILICON
POWER DARLINGTON TRANSISTOR

DPAK **POWER!**™



DPAK CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CJD112, CJD117 types are Complementary Silicon Power Darlington Transistors manufactured in a surface mount package designed for low speed switching and amplifier applications.

MAXIMUM RATINGS (T_C=25°C)

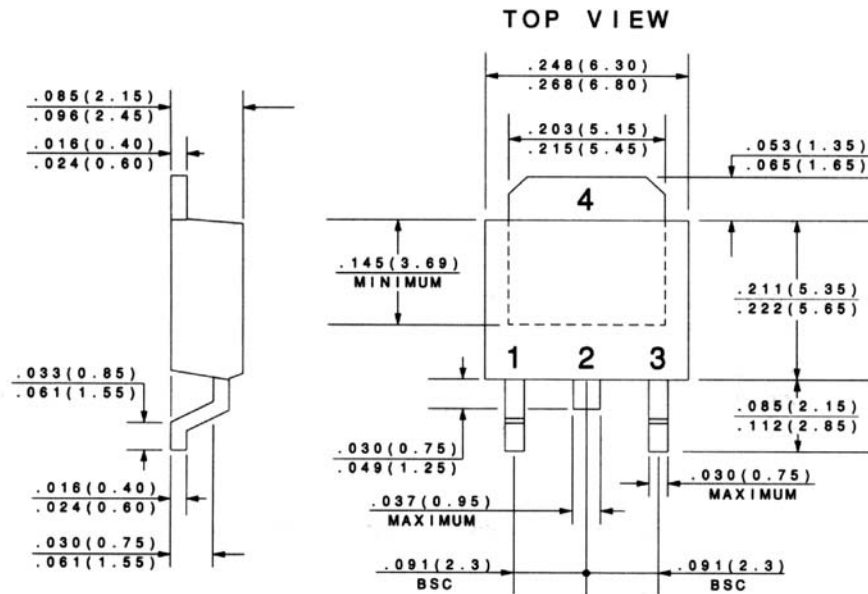
	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	100	V
Collector-Emitter Voltage	V _{CEO}	100	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Continuous Collector Current	I _C	2.0	A
Peak Collector Current	I _{CM}	4.0	A
Base Current	I _B	50	mA
Power Dissipation (T _C =25°C)	P _D	20	W
Power Dissipation (T _A =25°C)	P _D	1.75	W
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JC}	6.25	°C/W
Thermal Resistance	θ _{JA}	71.4	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CEO}	V _{CE} =50V		20	μA
I _{CEV}	V _{CE} =80V, V _{BE(off)} =1.5V		10	μA
I _{CEV}	V _{CE} =80V, V _{BE(off)} =1.5V, T _C =125°C		500	μA
I _{CBO}	V _{CB} =80V		10	μA
I _{CBO}	V _{CB} =100V		20	μA
I _{EBO}	V _{EB} =5.0V		2.0	mA
BV _{CEO}	I _C =30mA		100	V
V _{CE(SAT)}	I _C =2.0A, I _B =8.0mA		2.0	V
V _{CE(SAT)}	I _C =4.0A, I _B =40mA		3.0	V
V _{BE(SAT)}	I _C =4.0A, I _B =40mA		4.0	V

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$V_{BE(ON)}$	$V_{CE}=3.0V, I_C=2.0A$		2.8	V
h_{FE}	$V_{CE}=3.0V, I_C=0.5A$	500		
h_{FE}	$V_{CE}=3.0V, I_C=2.0A$	1000	12000	
h_{FE}	$V_{CE}=3.0V, I_C=4.0A$	200		
f_T	$V_{CE}=10V, I_C=750mA, f=1.0MHz$	25		MHz
C_{ob}	$V_{CB}=10V, I_E=0, f=0.1MHz (CJD112)$		100	pF
C_{ob}	$V_{CB}=10V, I_E=0, f=0.1MHz (CJD117)$		200	pF

All dimensions in inches (mm).



LEAD CODE:

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