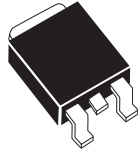


CJD2955 NPN
CJD3055 PNP

COMPLEMENTARY SILICON
POWER TRANSISTOR

DKPAK
POWER!



DPAK TRANSISTOR CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CJD2955, CJD3055 types are Complementary Silicon Power Transistors manufactured by the epitaxial base process, mounted in a surface mount package designed for high current amplifier and switching applications.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	70	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	10	A
Base Current	I_B	6.0	A
Power Dissipation	P_D	20	W
Power Dissipation ($T_A=25^\circ\text{C}$)	P_D	1.75	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JC}	6.25	$^\circ\text{C/W}$
Thermal Resistance	θ_{JA}	71.4	$^\circ\text{C/W}$

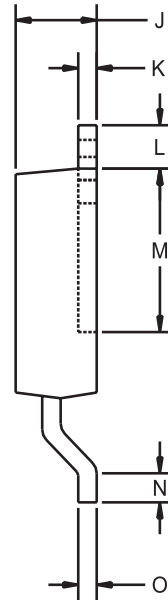
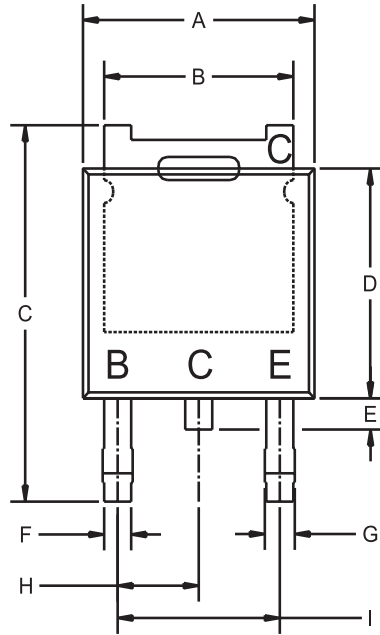
ELECTRICAL CHARACTERISTICS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CEO}	$V_{CE}=30\text{V}$		50	μA
I_{CEV}	$V_{CE}=70\text{V}, V_{BE(\text{off})}=1.5\text{V}$		20	μA
I_{CEV}	$V_{CE}=70\text{V}, V_{BE(\text{off})}=1.5\text{V}, T_C=150^\circ\text{C}$		2.0	mA
I_{CBO}	$V_{CB}=70\text{V}$		20	μA
I_{CBO}	$V_{CB}=70\text{V}, T_C=150^\circ\text{C}$		2.0	mA
I_{EBO}	$V_{EB}=5.0\text{V}$		500	μA
BV_{CEO}	$I_C=30\text{mA}$	60		V
$V_{CE(\text{SAT})}$	$I_C=4.0\text{A}, I_B=400\text{mA}$		1.1	V
$V_{CE(\text{SAT})}$	$I_C=10\text{A}, I_B=3.3\text{A}$		8.0	V
$V_{BE(\text{ON})}$	$V_{CE}=4.0\text{V}, I_C=4.0\text{A}$		1.8	V
h_{FE}	$V_{CE}=4.0\text{V}, I_C=4.0\text{A}$	20	100	
h_{FE}	$V_{CE}=4.0\text{V}, I_C=10\text{A}$	5.0		
f_T	$V_{CE}=10\text{V}, I_C=500\text{mA}, f=1.0\text{MHz}$	2.0		MHz

R1 (26-September 2002)

**COMPLEMENTARY SILICON
POWER TRANSISTOR**

DPAK TRANSISTOR CASE - MECHANICAL OUTLINE



R1

LEAD CODE:

- B) BASE
- C) COLLECTOR
- E) EMITTER
- C) COLLECTOR

MARKING CODE:

FULL PART NUMBER

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.250	0.265	6.35	6.73
B	0.205	0.215	5.21	5.46
C	0.374	0.409	9.50	10.40
D	0.235	0.245	5.97	6.22
E	0.025	0.040	0.64	1.02
F	0.025	0.035	0.64	0.88
G	0.030	0.045	0.76	1.14
H	0.090		2.28	
I	0.180		4.57	
J	0.086	0.094	2.19	2.38
K	0.018	0.023	0.46	0.58
L	0.040	0.050	1.02	1.27
M	0.170	-	4.32	-
N	0.020	-	0.51	-
O	0.018	0.023	0.46	0.58

DPAK TRANSISTOR (REV: R1)

R1 (26-September 2002)