CJD31C NPN
CJD32C PNP

SURFACE MOUNT SILICON
COMPLEMENTARY
POWER TRANSISTORS

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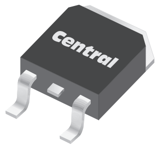
DESCRIPTION:
The CENTRAL SEMICONDUCTOR CJD31C and CJD32C are complementary silicon power transistors manufactured by the epitaxial base process, mounted in a surface mount package, and designed for power amplifier and high speed switching applications.

MARKING: FULL PART NUMBER



DPAK CASE

MAXIMUM RATINGS: (T_C=25°C unless otherwise noted)

	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	3.0	A
Peak Collector Current	I_{CM}	5.0	A
Continuous Base Current	I_B	1.0	A
Power Dissipation	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}=60V		50	μA
I_{CES}	V_{CE}=100V		20	μA
I_{EBO}	V_{EB}=5.0V		1.0	mA
BV_{CEO}	I_C=30mA	100		V
$V_{CE(SAT)}$	I_C=3.0A, I_B=375mA		1.2	V
$V_{BE(ON)}$	V_{CE}=4.0V, I_C=3.0A		1.8	V
h_{FE}	V_{CE}=4.0V, I_C=1.0A	25		
h_{FE}	V_{CE}=4.0V, I_C=3.0A	10	50	
f_T	V_{CE}=10V, I_C=500mA, f=1.0MHz	3.0		MHz
h_{fe}	V_{CE}=10V, I_C=500mA, f=1.0kHz	20		

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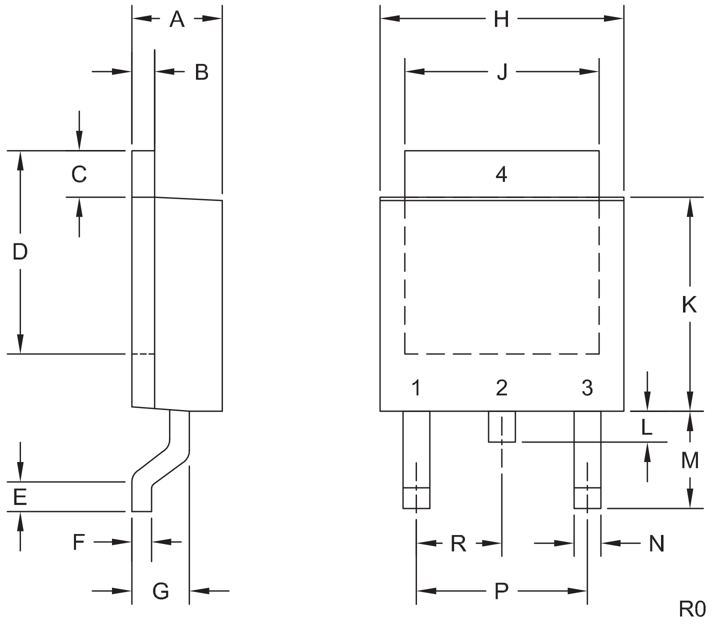
DPAK CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.083	0.108	2.10	2.75
B	0.016	0.032	0.40	0.81
C	0.035	0.063	0.89	1.60
D	0.203	0.228	5.15	5.79
E	0.020	-	0.51	-
F	0.018	0.024	0.45	0.60
G	0.051	0.071	1.30	1.80
H	0.248	0.268	6.30	6.81
J	0.197	0.217	5.00	5.50
K	0.209	0.245	5.30	6.22
L	0.025	0.040	0.64	1.02
M	0.090	0.115	2.30	2.91
N	0.012	0.045	0.30	1.14
P	0.180		4.60	
R	0.090		2.30	

DPAK (REV: R0)

LEAD CODE:
1) Base
2) Collector
3) Emitter
4) Collector

MARKING:
FULL PART NUMBER

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

CONTACT US

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