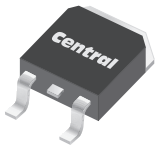
CJD340 NPN
CJD350 PNP

SURFACE MOUNT SILICON COMPLEMENTARY POWER TRANSISTORS



DPAK CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CJD340 and CJD350 are complementary silicon power transistors manufactured in a surface mount package, and designed for high voltage general purpose applications.

MARKING: FULL PART NUMBER

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

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	3.0	V
Continuous Collector Current	I_C	500	mA
Peak Collector Current	I_{CM}	750	mA
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

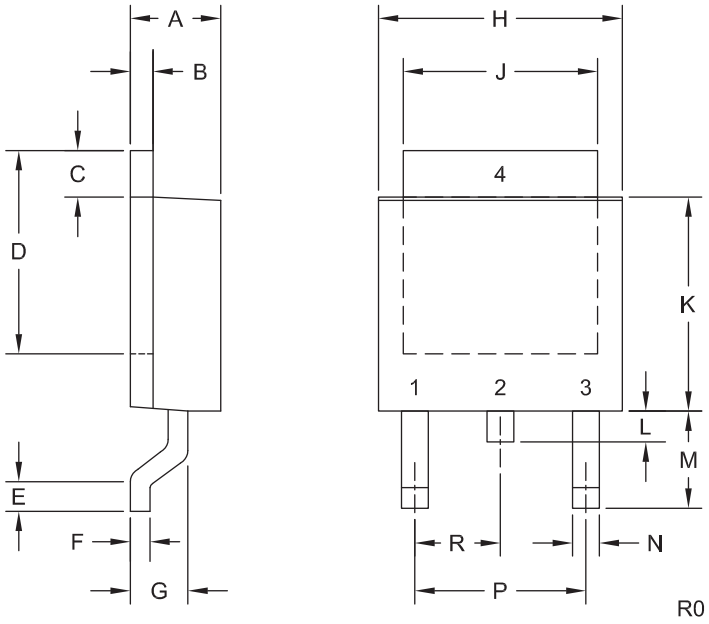
ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	V_{CB}=300V		100	μA
I_{CEO}	V_{CE}=300V		100	μA
I_{EBO}	V_{EB}=3.0V		100	μA
BV_{CEO}	I_C=1.0mA	300		V
$V_{CE(SAT)}$	I_C=100mA, I_B=10mA (CJD340)		1.0	V
$V_{CE(SAT)}$	I_C=100mA, I_B=10mA (CJD350)		2.6	V
$V_{BE(ON)}$	V_{CE}=10V, I_C=1.0A (CJD340)		1.5	V
$V_{BE(ON)}$	V_{CE}=10V, I_C=1.0A (CJD350)		2.0	V
h_{FE}	V_{CE}=10V, I_C=50mA	30	240	
f_T	V_{CE}=10V, I_C=50mA, f=10MHz	10		MHz

CJD340 NPN
CJD350 PNP

SURFACE MOUNT SILICON
COMPLEMENTARY
POWER TRANSISTORS

DPAK CASE - MECHANICAL OUTLINE



R0

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

MARKING:
FULL PART NUMBER

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	

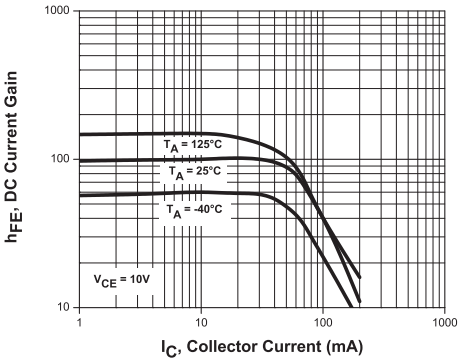
DPAK (REV: R0)

CJD340 NPN
CJD350 PNP

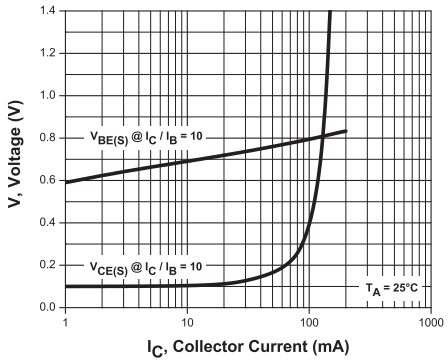
SURFACE MOUNT SILICON COMPLEMENTARY POWER TRANSISTORS

NPN TYPICAL ELECTRICAL CHARACTERISTICS

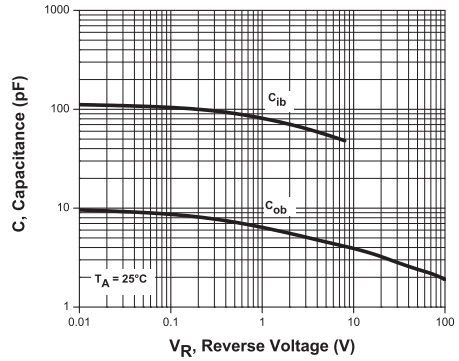
DC Current Gain



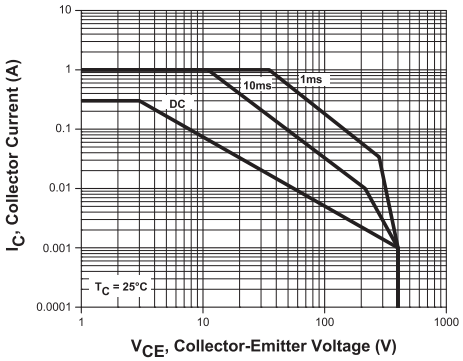
"ON" Voltage



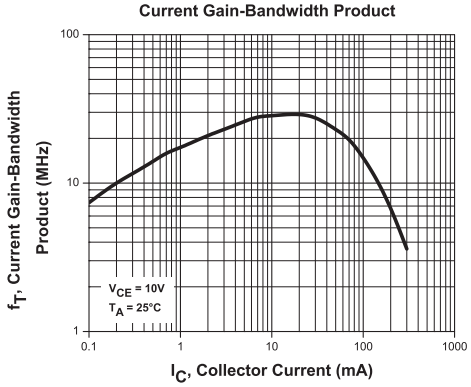
Capacitance



Safe Operating Area



Current Gain-Bandwidth Product



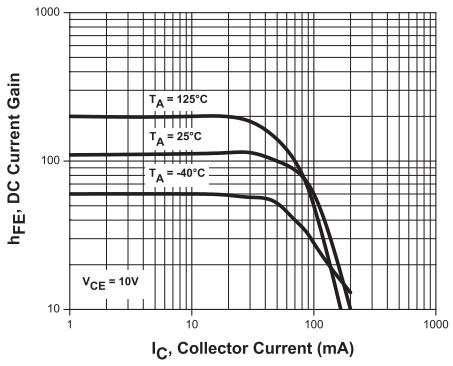
R5 (11-June 2013)

CJD340 NPN
CJD350 PNP

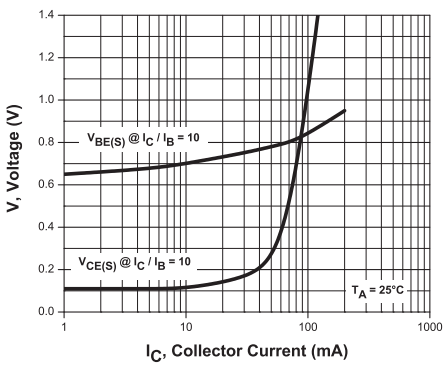
SURFACE MOUNT SILICON COMPLEMENTARY POWER TRANSISTORS

PNP TYPICAL ELECTRICAL CHARACTERISTICS

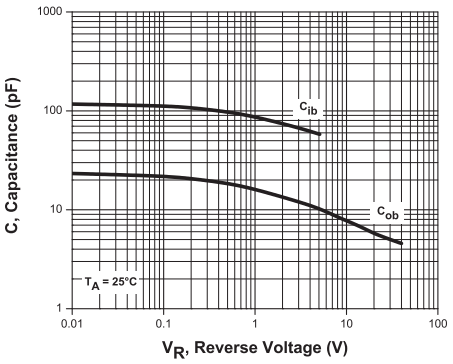
DC Current Gain



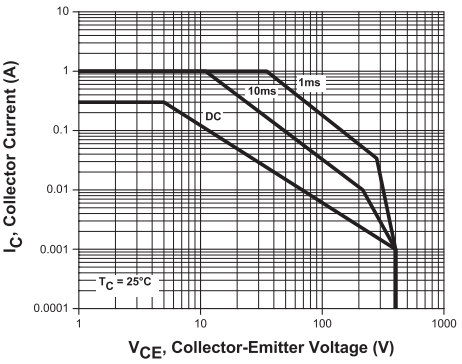
"ON" Voltage



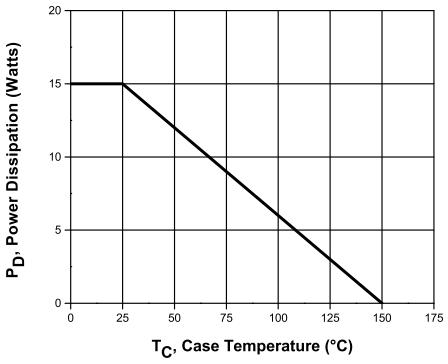
Capacitance



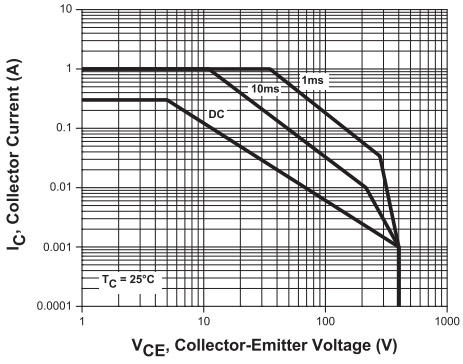
Safe Operating Area



Power Derating



Safe Operating Area



R5 (11-June 2013)