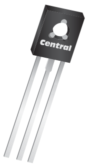
MJE200 NPN
MJE210 PNP

COMPLEMENTARY SILICON POWER TRANSISTORS



TO-126 CASE

Central Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MJE200, MJE210 types are complementary silicon transistors designed for high gain amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	8.0	V
Continuous Collector Current	I_C	5.0	A
Peak Collector Current	I_{CM}	10	A
Continuous Base Current	I_B	1.0	A
Power Dissipation	P_D	1.5	W
Power Dissipation (T_C=25°C)	P_D	15	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	83.4	°C/W
Thermal Resistance	Θ_{JC}	8.34	°C/W

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

SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=40V		100	nA
I_{CBO}	V_{CB}=40V, T_J=125°C		100	μA
I_{EBO}	V_{EB}=8.0V		100	nA
BV_{CEO}	I_C=10mA	25		V
$V_{CE(SAT)}$	I_C=500mA, I_B=50mA		0.3	V
$V_{CE(SAT)}$	I_C=2.0A, I_B=200mA		0.75	V
$V_{CE(SAT)}$	I_C=5.0A, I_B=1.0A		1.8	V
$V_{BE(SAT)}$	I_C=5.0A, I_B=1.0A		2.5	V
$V_{BE(ON)}$	V_{CE}=1.0V, I_C=2.0A		1.6	V
h_{FE}	V_{CE}=1.0V, I_C=500mA	70		
h_{FE}	V_{CE}=1.0V, I_C=2.0A	45	180	
h_{FE}	V_{CE}=2.0V, I_C=5.0A	10		
f_T	V_{CE}=10V, I_C=100mA, f=10MHz	65		MHz
C_{ob}	V_{CB}=10V, I_E=0, f=100kHz (MJE200)		80	pF
C_{ob}	V_{CB}=10V, I_E=0, f=100kHz (MJE210)		120	pF

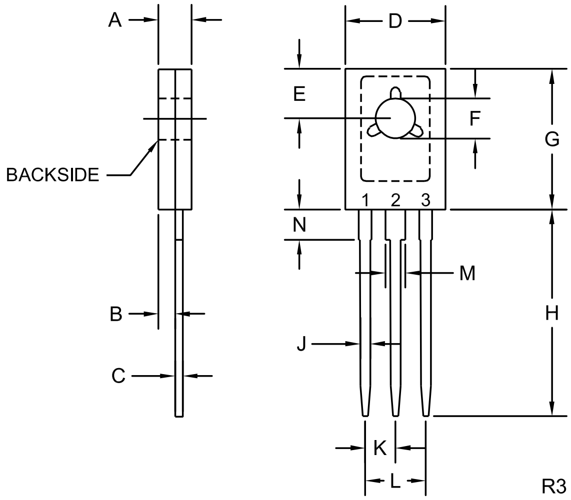
R1 (2-May 2012)

MJE200 NPN
MJE210 PNP

COMPLEMENTARY SILICON
POWER TRANSISTORS

Central
Semiconductor Corp.

TO-126 CASE - MECHANICAL OUTLINE



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

MARKING:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.094	0.110	2.40	2.80
B	0.050		1.27	
C	0.015	0.030	0.38	0.75
D	0.291	0.335	7.40	8.50
E	0.148		3.75	
F	0.118	0.134	3.00	3.40
G	0.413	0.472	10.50	12.00
H	0.618		15.70	
J	0.024	0.035	0.62	0.90
K	0.089		2.25	
L	0.177		4.50	
M	0.045	0.055	1.14	1.40
N	0.083		2.10	

TO-126 (REV:R3)

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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