



Central Semiconductor Corp.

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DESCRIPTION:

The CENTRAL SEMICONDUCTOR MJE700, MJE800 series devices are medium power complementary silicon Darlington transistors designed for audio amplifier applications as complementary output devices.

MJE702

MARKING: FULL PART NUMBER

MJE700

			MJE700 MJE800	MJE703 MJE802	
MAXIMUM RATINGS: (T _C =25°C)		SYMBOL	<u>MJE801</u>	<u>MJE803</u>	UNITS
Collector-Base Voltage		VCBO	60	80	V
Collector-Emitter Voltage		VCEO	60	80	V
Emitter-Base Voltage		VEBO	5.		V
Continuous Collector Current		IC	4.		A
Continuous Base Current		Ι _Β	10		mA
Power Dissipation		PD	4	0	W
Operating and Storage Junction Temperature		T _J , T _{stg} -65 to +150		+150	°C
Thermal Resistance		ΘJC	3.1	13	°C/W
	. CHARACTERISTICS: (T _C =25°C ur	less otherwise r	noted)		
SYMBOL	TEST CONDITIONS	MIN	MA		UNITS
IСВО	V _{CB} =Rated V _{CBO}		10	00	μA
ICBO	V _{CB} =Rated V _{CBO} , T _C =100°C		50	00	μA
ICEO	V _{CE} =Rated V _{CEO}		10	00	μA
IEBO	V _{EB} =5.0V		2.	0	mA
BVCEO	I _C =50mA (MJE702,703,802,803)	80			V
BVCEO	I _C =50mA (MJE700,701,800,801)	60			V
V _{CE(SAT)}	I _C =1.5A, I _B =30mA (MJE700,702,80	0,802)	2.	5	V
V _{CE(SAT)}	I _C =2.0A, I _B =40mA (MJE701,703,80)1,803)	2.	8	V
V _{CE(SAT)}	I _C =4.0A, I _B =40mA		3.	0	V
V _{BE(ON)}	V _{CE} =3.0V, I _C =1.5A (MJE700,702,8	300,802)	2.	5	V
V _{BE(ON)}	V _{CE} =3.0V, I _C =2.0A (MJE701,703,8	301,803)	2.	5	V
V _{BE(ON)}	V _{CF} =3.0V, I _C =4.0A		3.	0	V
h _{FE}	V _{CF} =3.0V, I _C =1.5A (MJE700,702,8	300,802) 750			
h _{FE}	V _{CF} =3.0V, I _C =2.0A (MJE701,703,8	801,803) 750			
h _{FE}	V _{CF} =3.0V, I _C =4.0A	100			
fT	V _{CE} =3.0V, I _C =1.5A, f=1.0MHz	1.0			MHz

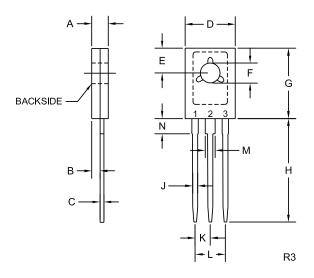
R2 (23-January 2014)



MJE700 THRU MJE703 PNP MJE800 THRU MJE803 NPN

COMPLEMENTARY POWER DARLINGTON TRANSISTORS

TO-126 CASE - MECHANICAL OUTLINE



LEAD CODE: 1) Emitter

- 2) Collector 3) Base
- .) 2000

MARKING: FULL PART NUMBER

DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
А	0.094	0.110	2.40	2.80		
В	0.050		1.27			
С	0.015	0.030	0.38	0.75		
D	0.291	0.335	7.40	8.50		
Е	0.148		3.75			
F	0.118	0.134	3.00	3.40		
G	0.413	0.472	10.50	12.00		
Н	0.618		15.70			
J	0.024	0.035	0.62	0.90		
K	0.089		2.25			
L	0.177		4.50			
М	0.045	0.055	1.14	1.40		
Ν	0.083		2.10			

TO-126 (REV:R3)

R2 (23-January 2014)

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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

DESIGNER SUPPORT/SERVICES

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

- Free guick 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

· Custom product packing

Custom bar coding for shipments

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- · Custom product and package development

REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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