

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors
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MJE9780

PNP SILICON
POWER TRANSISTOR
3.0 AMPS, 150 VOLTS

JEDEC TO-220 CASE

DESCRIPTION:

The Central Semiconductor MJE9780 is a PNP power transistor packaged in a TO-220 case, designed for CRT output applications.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	<u>SYMBOL</u>		<u>UNITS</u>
Collector-Base Voltage	V _{CBO}	200	V
Collector-Emitter Voltage	V _{CEO}	150	V
Emitter-Base Voltage	V _{EBO}	6.0	V
Collector Current	I _C	3.0	A
Peak Collector Current	I _{CM}	5.0	A
Power Dissipation (T _A =25°C)	P _D	2.0	W
Power Dissipation (T _C =25°C)	P _D	40	W
Operating and Storage Junction Temperature	T _J , T _{stg}	-55 to +150	°C
Thermal Resistance	θ _{JC}	3.12	°C/W
Thermal Resistance	θ _{JA}	62.5	°C/W

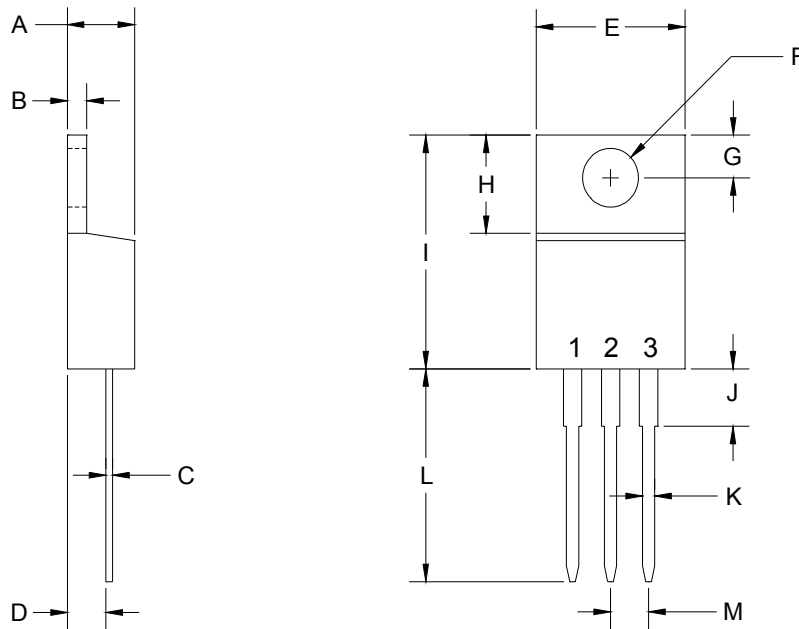
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
I _{CBO}	V _{CB} =150V			10	μA
I _{EBO}	V _{EB} =5.0V			10	μA
BV _{CBO}	I _C =5.0mA	200			V
BV _{CEO}	I _C =50mA	150			V
BV _{EBO}	I _B =5.0mA	6.0			V
V _{CE(SAT)}	I _C =500mA, I _B =50mA			0.8	V
V _{BE(ON)}	V _{CE} =4.0V, I _C =500mA			1.5	V
h _{FE}	V _{CE} =10V, I _C =50mA	60			
h _{FE}	V _{CE} =10V, I _C =500mA	50		200	
f _T	V _{CE} =10V, I _C =500mA, f=1.0MHz		5.0		MHz

(SEE REVERSE SIDE)

R0

TO-220 PACKAGE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.176	0.190	4.48	4.82
B	0.045	0.055	1.15	1.39
C	0.014	0.026	0.35	0.65
D	0.083	0.106	2.10	2.70
E	0.394	0.417	10.01	10.60
F (DIA)	0.140	0.157	3.55	4.00
G	0.100	0.118	2.54	3.00
H	0.230	0.270	5.85	6.85
I	0.560	0.625	14.23	15.87
J	-	0.250	-	6.35
K	0.025	0.038	0.64	0.96
L	0.500	0.579	12.70	14.70
M	0.090	0.110	2.29	2.79

TO-220 (REV: R1)

Lead Code

- 1) Base
- 2) Collector
- 3) Emitter

Tab is common To Pin 2.

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