

MJE350

Plastic Medium Power PNP Silicon Transistor

This device is designed for use in line-operated applications such as low power, line-operated series pass and switching regulators requiring PNP capability.

Features

- High Collector-Emitter Sustaining Voltage –
 $V_{CEO(sus)} = 300 \text{ Vdc @ } I_C = 1.0 \text{ mAdc}$
- Excellent DC Current Gain –
 $h_{FE} = 30-240 @ I_C = 50 \text{ mAdc}$
- Plastic Thermopad Package
- Pb-Free Package is Available*

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	300	Vdc
Emitter-Base Voltage	V_{EB}	3.0	Vdc
Collector Current – Continuous	I_C	500	mAdc
Total Power Dissipation @ $T_C = 25^\circ\text{C}$ Derate above 25°C	P_D	20 0.16	W mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction-to-Case	θ_{JC}	6.25	$^\circ\text{C/W}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Collector-Emitter Sustaining Voltage ($I_C = 1.0 \text{ mAdc}, I_B = 0$)	$V_{CEO(sus)}$	300	–	Vdc
Collector Cutoff Current ($V_{CB} = 300 \text{ Vdc}, I_E = 0$)	I_{CBO}	–	100	μAdc
Emitter Cutoff Current ($V_{EB} = 3.0 \text{ Vdc}, I_C = 0$)	I_{EBO}	–	100	μAdc

ON CHARACTERISTICS

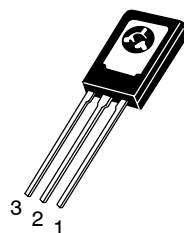
DC Current Gain ($I_C = 50 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$)	h_{FE}	30	240	–
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*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.



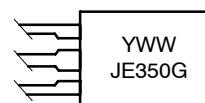
ON Semiconductor®

**0.5 AMPERE
POWER TRANSISTOR
PNP SILICON
300 VOLTS, 20 WATTS**



TO-225
CASE 77
STYLE 1

MARKING DIAGRAM



Y = Year
WW = Work Week
JE350 = Device Code
G = Pb-Free Package

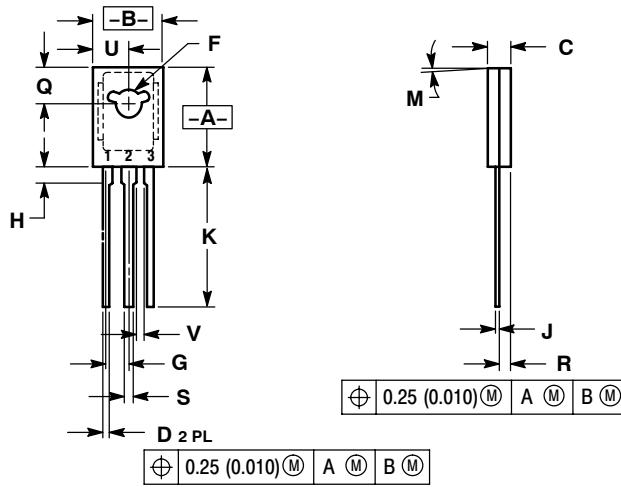
ORDERING INFORMATION

Device	Package	Shipping
MJE350	TO-225	500 Units/Box
MJE350G	TO-225 (Pb-Free)	500 Units/Box

MJE350

PACKAGE DIMENSIONS

TO-225
CASE 77-09
ISSUE Z



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. 077-01 THRU -08 OBSOLETE, NEW STANDARD 077-09.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.425	0.435	10.80	11.04
B	0.295	0.305	7.50	7.74
C	0.095	0.105	2.42	2.66
D	0.020	0.026	0.51	0.66
F	0.115	0.130	2.93	3.30
G	0.094 BSC		2.39 BSC	
H	0.050	0.095	1.27	2.41
J	0.015	0.025	0.39	0.63
K	0.575	0.655	14.61	16.63
M	5° TYP		5° TYP	
Q	0.148	0.158	3.76	4.01
R	0.045	0.065	1.15	1.65
S	0.025	0.035	0.64	0.88
U	0.145	0.155	3.69	3.93
V	0.040	---	1.02	---

STYLE 1:

1. EMITTER
2. COLLECTOR
3. BASE