

MJE15028, MJE15030 (NPN), MJE15029, MJE15031 (PNP)

Complementary Silicon Plastic Power Transistors

These devices are designed for use as high-frequency drivers in audio amplifiers.

Features

- High Current Gain – Bandwidth Product
- TO-220 Compact Package
- These Devices are Pb-Free and are RoHS Compliant*

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage MJE15028G, MJE15029G MJE15030G, MJE15031G	V_{CEO}	120 150	Vdc
Collector-Base Voltage MJE15028G, MJE15029G MJE15030G, MJE15031G	V_{CB}	120 150	Vdc
Emitter-Base Voltage	V_{EB}	5.0	Vdc
Collector Current – Continuous	I_C	8.0	Adc
Collector Current – Peak	I_{CM}	16	Adc
Base Current	I_B	2.0	Adc
Total Device Dissipation @ $T_C = 25^\circ\text{C}$ Derate above 25°C	P_D	50 0.40	W W/ $^\circ\text{C}$
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	2.0 0.016	W W/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

THERMAL CHARACTERISTICS

Characteristics	Symbol	Max	Unit
Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	2.5	$^\circ\text{C}/\text{W}$
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	62.5	$^\circ\text{C}/\text{W}$

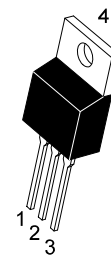
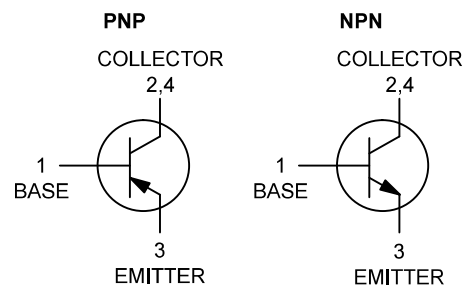
*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.



ON Semiconductor®

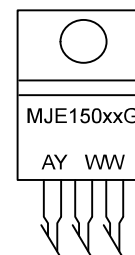
<http://onsemi.com>

8 AMPERE POWER TRANSISTORS COMPLEMENTARY SILICON 120-150 VOLTS, 50 WATTS



TO-220
CASE 221A
STYLE 1

MARKING DIAGRAM



MJE150xx = Device Code
x = 28, 29, 30, or 31
A = Assembly Location
Y = Year
WW = Work Week
G = Pb-Free Package

ORDERING INFORMATION

See detailed ordering and shipping information in the package dimensions section on page 5 of this data sheet.