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## MJE340 Silicon NPN Transistor Audio Power Amp, High Voltage Converter TO-126 Type Package

**Description:**

The MJE340 is a silicon NPN transistor in a TO-126 type package designed for high-voltage, general purpose applications.

**Features:**

- Suitable for Transformerless, Line-Operated Equipment
- High Power Dissipation Rating for High Reliability

**Absolute Maximum Ratings:** (Note 1)

Collector-Emitter Voltage, $V_{CEO}$ .....	300V
Emitter-Base Voltage, $V_{EB}$ .....	3V
Continuous Collector Current, $I_C$ .....	500mA
Base Current, $I_B$ .....	250mA
Total Power Dissipation ( $T_C = +25^\circ\text{C}$ ), $P_D$ .....	20W
Derate Above $25^\circ\text{C}$ .....	0.16W/ $^\circ\text{C}$
Operating Junction Temperature Range, $T_J$ .....	$-65^\circ$ to $+150^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-65^\circ$ to $+150^\circ\text{C}$
Thermal Resistance, Junction-to-Case, $R_{thJC}$ .....	6.25 $^\circ\text{C}/\text{W}$

Note 1. Stresses exceeding those listed in the Absolute 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.

**Electrical Characteristics:** ( $T_C = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
<b>OFF Characteristics</b>						
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C = 1\text{mA}, I_B = 0$	300	-	-	V
Collector Cutoff Current	$I_{CEO}$	$V_{CB} = 300\text{V}, I_E = 0$	-	-	100	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 3\text{V}, I_C = 0$	-	-	100	$\mu\text{A}$
<b>ON Characteristics</b>						
DC Current Gain	$h_{FE}$	$I_C = 50\text{mA}, V_{CE} = 10\text{V}$	30	-	240	

