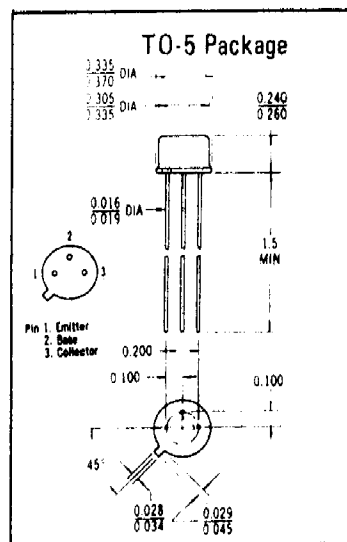


2N526 GERMANIUM)

PNP germanium transistor for switching and amplifier applications in the audio-frequency range.

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Base Voltage	V_{CB}	45	Vdc
Collector-Emitter Voltage	V_{CEO}	30	Vdc
Emitter-Base Voltage	V_{EB}	15	Vdc
Collector Current	I_C	500	mAdc
Storage and Operating Temperature	T_{stg}, T_J	-65 to +100	°C
Collector Dissipation @ 25°C Ambient	P_D	225	mW
Thermal Resistance Junction to Ambient	θ_{JA}	0.333	°C/mW
Thermal Resistance (infinite heat sink)	θ_{JC}	0.15	°C/mW



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

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

Characteristics	Symbol	Min	Max	Unit
Collector Cutoff Current ($V_{CB} = 30\text{ Vdc}$, $I_E = 0$)	I_{CBO}	-	10	$\mu\text{A dc}$
Emitter Cutoff Current ($V_{EB} = 15\text{ Vdc}$, $I_C = 0$)	I_{EBO}	-	10	$\mu\text{A dc}$
Collector-Emitter Breakdown Voltage ($I_C = 0.6\text{ mA dc}$, $R_{BE} = 10\text{K}$)	BV_{CER}	30	-	$\mu\text{V dc}$
Collector-Emitter Reach Through (Punch-Thru) Voltage ($V_{EB} = 1\text{ Vdc}$, $V_{TVM Z} \geq 1\text{ Megohm}$)	V_{RT}	30	-	$\mu\text{V dc}$
Static Forward-Current Transfer Ratio ($V_{CE} = 1\text{ Vdc}$, $I_C = 20\text{ mA dc}$)	h_{FE}	53	90	-
Small-Signal Short-Circuit Forward Current Transfer Ratio Frequency Cutoff ($V_{CB} = 5\text{ Vdc}$, $I_E = 1\text{ mA dc}$)	f_{ob}	1.3	6.5	MHz
Output Capacitance ($V_{CB} = 5\text{ Vdc}$, $I_E = 1\text{ mA dc}$, $f = 1\text{ MHz}$)	C_{ob}	5.0	40	pF
Small-Signal Open Circuit Output Admittance ($V_{CB} = 5\text{ Vdc}$, $I_E = 1\text{ mA dc}$, $f = 1\text{ kHz}$)		0.10	1.0	
Small-Signal Open Circuit Reverse Transfer Voltage Ratio ($V_{CB} = 5\text{ Vdc}$, $I_E = 1\text{ mA dc}$, $f = 1\text{ kHz}$)	h_{rb}	1.0	12	$\times 10^{-4}$
Small-Signal Short Circuit Input Impedance ($V_{CB} = 5\text{ Vdc}$, $I_E = 1\text{ mA dc}$, $f = 1\text{ kHz}$)	h_{ib}	26	33	ohms
Collector-Emitter Saturation Voltage ($I_B = 1.0\text{ mA dc}$, $I_C = 20\text{ mA dc}$)	$V_{CE(sat)}$	-	130	
Base Input Voltage ($V_{CE} = 1\text{ Vdc}$, $I_C = 20\text{ mA dc}$)	V_{BE}	190	280	
Noise Figure ($V_{CB} = 5\text{ Vdc}$, $I_E = 1\text{ mA dc}$, $f = 1\text{ kHz}$, $BW = 1\text{ Hz}$)	NF	-	15	dB
Small-Signal Short-Circuit Forward-Current Transfer Ratio ($V_{CE} = 5\text{ Vdc}$, $I_F = 1\text{ mA dc}$, $f = 1\text{ kHz}$)	h_{fe}	44	88	