

Type 2N4261

Geometry 0014

Polarity PNP

Qual Level: JAN - JANS

**Generic Part Number:
2N4261**

REF: MIL-PRF-19500/511

Features:

[Request Quotation](#)

- Fast switching small signal silicon transistor.
- Housed in a [TO-72](#) case.
- Also available in chip form using the [0014](#) chip geometry.
- The Min and Max limits shown are per [MIL-PRF-19500/511](#) which Semicoa meets in all cases.
- [Radiation graphs available.](#)



[TO-72](#)

Maximum Ratings

$T_C = 25^{\circ}\text{C}$ unless otherwise specified

Rating	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	15	V
Collector-Base Voltage	V_{CBO}	15	V
Emitter-Base Voltage	V_{EBO}	4.5	V
Collector Current, Continuous	I_C	30	mA
Operating Junction Temperature	T_J	-65 to +200	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65 to +200	$^{\circ}\text{C}$

Electrical Characteristics

 $T_C = 25^{\circ}\text{C}$ unless otherwise specified

OFF Characteristics	Symbol	Min	Max	Unit
Collector-Base Breakdown Voltage $I_C = 10\ \mu\text{A}$	$V_{(BR)CBO}$	15	---	V
Collector-Emitter Breakdown Voltage $I_C = 10\ \text{mA}$	$V_{(BR)CEO}$	15	---	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	4.5	---	V
Collector-Emitter Cutoff Current $V_{CE} = 10\ \text{V}, V_{EB} = 0.4\ \text{V}$ $V_{CE} = 10\ \text{V}, V_{EB} = 2.0\ \text{V}$ $V_{CE} = 10\ \text{V}, V_{EB} = 2.0\ \text{V}, T_A = +150^{\circ}\text{C}$	I_{CEX1} I_{CEX2} I_{CEX3}	--- --- ---	50 5.0 5.0	nA nA μA
Base Cutoff Current $V_{CE} = 10\ \text{V}, V_{EB} = 2.0\ \text{V}$	I_{BEX}	---	5.0	nA
Emitter-Base Cutoff Current $V_{EB} = 4.5\ \text{V}$	I_{EBO}	---	10	μA

ON Characteristics	Symbol	Min	Max	Unit
Forward current Transfer Ratio $I_C = 1.0\ \text{mA}, V_{CE} = 1.0\ \text{V}$ $I_C = 10\ \text{mA}, V_{CE} = 1.0\ \text{V}$, pulsed $I_C = 30\ \text{mA}, V_{CE} = 1.0\ \text{V}$ pulsed $I_C = 10\ \text{mA}, V_{CE} = 1.0\ \text{V}, T_A = -55^{\circ}\text{C}$	h_{FE1} h_{FE2} h_{FE3} h_{FE4}	25 30 20 15	--- 150 --- ---	--- --- --- ---
Collector-Emitter Saturation Voltage $I_C = 1.0\ \text{mA}, I_B = 0.1\ \text{mA}$ $I_C = 10\ \text{mA}, I_B = 1.0\ \text{mA}$	$V_{CE(sat)1}$ $V_{CE(sat)2}$	--- ---	0.15 0.35	V dc V dc
Base-Emitter Saturation Voltage $V_{CE} = 1.0\ \text{V}, I_C = 1.0\ \text{mA}$ $V_{CE} = 1.0\ \text{V}, I_C = 10\ \text{mA}$	V_{BE1} V_{BE2}	--- ---	0.8 1.0	V dc V dc

Small Signal Characteristics	Symbol	Min	Max	Unit
Magnitude of Common Emitter Small Signal Short Circuit Forward Current Transfer Ratio $V_{CE} = 4.0\ \text{V}, I_C = 5.0\ \text{mA}, f = 100\ \text{MHz}$ $V_{CE} = 10\ \text{V}, I_C = 10\ \text{mA}, f = 100\ \text{MHz}$	$ h_{fe1} $ $ h_{fe2} $	15 20	--- ---	--- ---
Open Circuit Output Capacitance $V_{CB} = 4.0\ \text{V}, I_E = 0, 100\ \text{kHz} < f < 1\ \text{MHz}$	C_{OBO}	---	2.5	pF
Input Capacitance, Output Open Circuited $V_{EB} = 0.5\ \text{V}, I_C = 0, 100\ \text{kHz} < f < 1\ \text{MHz}$	C_{IBO}	---	2.5	pF

Switching Characteristics	Symbol	Min	Max	Unit
Collector-Base Time Constant $V_{CE} = 4.0\ \text{V}, I_C = 5.0\ \text{mA}, f = 31.8\ \text{MHz}$	$r'b'C_{C1}$	---	60	ps
Collector-Base Time Constant $V_{CE} = 4.0\ \text{V}, I_C = 10\ \text{mA}, f = 31.8\ \text{MHz}$	$r'b'C_{C2}$	---	50	ps
Saturated Turn On Switching Time to 90% $V_{CC} = 17\ \text{V}, 50\ \text{ohm pulse generator}$	t_{ON}	---	2.5	ns
Saturated Turn Off Switching Time to 10% $V_{CC} = 17\ \text{V}, 50\ \text{ohm pulse generator}$	t_{OFF}	---	3.5	ns