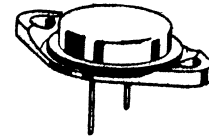


New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (201) 376-2922
(212) 227-6005
FAX: (201) 376-8960

2N4901 (SILICON)
2N4902
2N4903



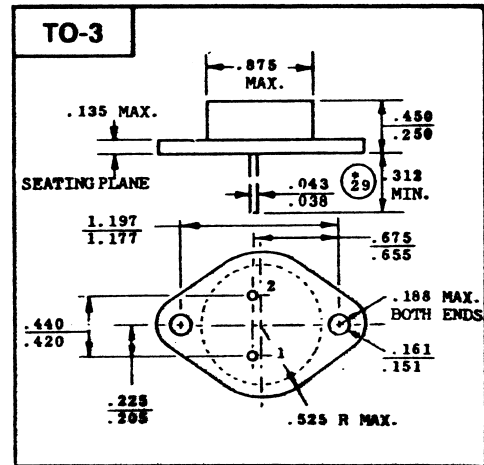
PNP power transistors for use in power amplifier and switching circuits. Complement to NPN 2N5087, 2N5068, 2N5069.

MAXIMUM RATINGS

Rating	Symbol	2N4901	2N4902	2N4903	Unit
Collector-Emitter Voltage	V_{CEO}	40	60	80	Vdc
Collector-Base Voltage	V_{CB}	40	60	80	Vdc
Emitter-Base Voltage	V_{EB}	5.0			Vdc
Collector Current - Continuous	I_C	5.0			Adc
Base Current	I_B	1.0			Adc
Total Device Dissipation $T_C = 25^\circ C$ Derate above $25^\circ C$	P_D	87.5			Watts
		0.5			W/°C
Operating & Storage Junction Temperature Range	T_J, T_{stg}	-65 to +200			°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	θ_{JC}	2.0	°C/W



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

Characteristic	Fig. No.	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Collector-Emitter Sustaining Voltage* ($I_C = 0.2$ Adc, $I_B = 0$)	2N4901 2N4902 2N4903	11	$V_{CEO(sus)}$	40 60 80	Vdc
Collector Cutoff Current ($V_{CE} = \text{Rated } V_{CEO}, I_B = 0$)			I_{CEO}	-	1.0 mAdc
Collector Cutoff Current ($V_{CE} = \text{Rated } V_{CEO}, V_{BE(off)} = 1.5$ Vdc) ($V_{CE} = \text{Rated } V_{CEO}, V_{BE(off)} = 1.5$ Vdc, $T_C = 150^\circ C$)		5.6	I_{CEX}	-	0.1 2.0 mAdc
Collector Cutoff Current ($V_{CB} = \text{Rated } V_{CB}, I_E = 0$)			I_{CBO}	-	0.1 mAdc
Emitter Cutoff Current ($V_{BE} = 5.0$ Vdc, $I_C = 0$)			I_{EBO}	-	1.0 mAdc

ON CHARACTERISTICS

DC Current Gain* ($I_C = 1.0$ Adc, $V_{CE} = 2.0$ Vdc) ($I_C = 5.0$ Adc, $V_{CE} = 2.0$ Vdc)		1	h_{FE}	20 7.0	80 -
Collector-Emitter Saturation Voltage* ($I_C = 1.0$ Adc, $I_B = 0.1$ Adc) ($I_C = 5.0$ Adc, $I_B = 1.0$ Adc)		2, 3, 4	$V_{CE(sat)}$	-	0.4 1.5 Vdc
Base-Emitter On Voltage* ($I_C = 1.0$ Adc, $V_{CE} = 2.0$ Vdc)		3, 4	$V_{BE(on)}$	-	1.2 Vdc

SMALL-SIGNAL CHARACTERISTICS

Current-Gain-Bandwidth Product ($I_C = 1.0$ Adc, $V_{CE} = 10$ Vdc, $f = 1.0$ MHz)			f_T	4.0	-	MHz
Small-Signal Current Gain ($I_C = 0.5$ Adc, $V_{CE} = 10$ Vdc, $f = 1.0$ kHz)			h_{fe}	20	-	

* Pulse Test: PW = 300 μs , Duty Cycle = 2.0%



Quality Semi-Conductors