

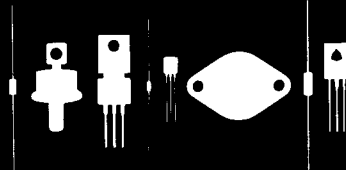
Central
Semiconductor Corp.

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145 Adams Avenue
Hauppauge, New York 11788



2N4901	2N4902	2N4903	PNP
2N5067	2N5068	2N5069	NPN

COMPLEMENTARY SILICON POWER
TRANSISTORS

JEDEC TO-3 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4901, 2N5067 series types are complementary silicon power transistors manufactured by the epitaxial base process, mounted in a hermetically sealed metal case designed for general purpose switching and amplifier applications.

MAXIMUM RATINGS ($T_C=25^\circ\text{C}$ unless otherwise noted)

	<u>SYMBOL¹</u>	<u>2N4901</u> <u>2N5067</u>	<u>2N4902</u> <u>2N5068</u>	<u>2N4903</u> <u>2N5069</u>	<u>UNIT</u>
Collector-Base Voltage	V _{CB0}	40	60	80	V
Collector-Emitter Voltage	V _{CEO}	40	60	80	V
Emitter-Base Voltage	V _{EB0}	5.0	5.0	5.0	V
Collector Current	I _C	5.0	5.0	5.0	A
Base Current	I _B	1.0	1.0	1.0	A
Power Dissipation	P _D	87.5	87.5	87.5	W
Operating and Storage Junction Temperature	T _J , T _{STG}	-65 TO +200			°C
Thermal Resistance	θ _{JC}	2.0			°C/W

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>2N4901</u> <u>2N5067</u>		<u>2N4902</u> <u>2N5068</u>		<u>2N4903</u> <u>2N5069</u>		<u>UNIT</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
I _{CB0}	V _{CB} =Rated V _{CB0} (NPN types)		1.0		1.0		1.0	mA
I _{CB0}	V _{CB} =Rated V _{CB0} (PNP types)		0.1		0.1		0.1	mA
I _{CEV}	V _{CE} =Rated V _{CEO} , V _{EB} (OFF)=1.5V (NPN types)		1.0		1.0		1.0	mA
I _{CEV}	V _{CE} =Rated V _{CEO} , V _{EB} (OFF)=1.5V (PNP types)		0.1		0.1		0.1	mA
I _{CEV}	V _{CE} =Rated V _{CEO} , V _{EB} (OFF)=1.5V, T _C =150°C		2.0		2.0		2.0	mA
I _{CEO}	V _{CE} =Rated V _{CEO}		1.0		1.0		1.0	mA
I _{EB0}	V _{BE} =5.0V		1.0		1.0		1.0	mA
BV _{CEO}	I _C =200mA	40		60		80		V
V _{CE} (SAT)	I _C =1.0A, I _B =0.1A		0.4		0.4		0.4	V
V _{CE} (SAT)	I _C =5.0A, I _B =1.0A		1.5		1.5		1.5	V
V _{BE} (ON)	V _{CE} =2.0V, I _C =1.0A		1.2		1.2		1.2	V
h _{FE}	V _{CE} =2.0V, I _C =1.0A	20	100	20	100	20	100	
h _{FE}	V _{CE} =2.0V, I _C =5.0A	7.0		7.0		7.0		
h _{fe}	V _{CE} =10V, I _C =0.5A, f=1.0kHz	20		20		20		
f _T	V _{CE} =10V, I _C =1.0A, f=1.0MHz	4.0		4.0		4.0		MHz

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