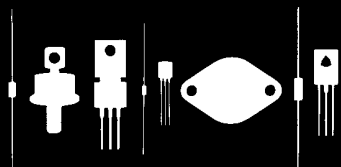


Central
Semiconductor Corp.
Central
Semiconductor Corp.
Central
Semiconductor Corp.
**Central™
Semiconductor Corp.**

145 Adams Avenue
Hauppauge, New York 11788



2N4960 2N4961 TO-39 CASE
2N4962 2N4963 TO-18 CASE

NPN SILICON TRANSISTORS

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4960 Series types are Silicon NPN Epitaxial Planar Transistors designed for general purpose amplifier and switching applications.

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

	SYMBOL	2N4960, 2N4962	2N4961, 2N4963	UNIT
Collector-Base Voltage	V_{CB0}	60	80	V
Collector-Emitter Voltage	V_{CE0}	60	80	V
Emitter-Base Voltage	V_{EB0}	6.5	6.5	V
Collector Current	I_C	1.0	1.0	A
		<u>2N4960, 2N4961</u>	<u>2N4962, 2N4963</u>	
Power Dissipation	P_D	0.8	0.5	W
Power Dissipation ($T_C=25^\circ\text{C}$)	P_D	3.5	1.5	W
Operating & Storage Junc. Temp.	T_J, T_{stg}	-65 TO +200		$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CB0}	$V_{CB}=50\text{V}$		10	nA
I_{EB0}	$V_{EB}=4.0\text{V}$		10	nA
BV_{CB0}	$I_C=10\mu\text{A}$ (2N4960,2)	60		V
BV_{CB0}	$I_C=10\mu\text{A}$ (2N4961,3)	80		V
BV_{CES}	$I_C=10\mu\text{A}$ (2N4960,2)	60		V
BV_{CES}	$I_C=10\mu\text{A}$ (2N4961,3)	80		V
BV_{CE0}	$I_C=10\text{mA}$ (2N4960,2)	60		V
BV_{CE0}	$I_C=10\text{mA}$ (2N4961,3)	80		V
BV_{EB0}	$I_E=10\mu\text{A}$	6.5		V
$V_{CE}(\text{SAT})$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.07	V
$V_{CE}(\text{SAT})$	$I_C=150\text{mA}, I_B=15\text{mA}$		0.18	V
$V_{CE}(\text{SAT})$	$I_C=300\text{mA}, I_B=30\text{mA}$		0.31	V
$V_{CE}(\text{SAT})$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.5	V
$V_{BE}(\text{SAT})$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.72	V
$V_{BE}(\text{SAT})$	$I_C=150\text{mA}, I_B=15\text{mA}$	0.78	0.90	V
$V_{BE}(\text{SAT})$	$I_C=300\text{mA}, I_B=30\text{mA}$		1.05	V
$V_{BE}(\text{SAT})$	$I_C=500\text{mA}, I_B=50\text{mA}$		1.30	V
$V_{BE}(\text{ON})$	$V_{CE}=10\text{V}, I_C=150\text{mA}$		0.88	V
h_{FE}	$V_{CE}=10\text{V}, I_C=100\mu\text{A}$	30		
h_{FE}	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$	60		
h_{FE}	$V_{CE}=10\text{V}, I_C=10\text{mA}$	90		
h_{FE}	$V_{CE}=10\text{V}, I_C=50\text{mA}$	100		
h_{FE}	$V_{CE}=1.0\text{V}, I_C=150\text{mA}$	40		
h_{FE}	$V_{CE}=10\text{V}, I_C=150\text{mA}$	100	300	
h_{FE}	$V_{CE}=10\text{V}, I_C=300\text{mA}$	70		
h_{FE}	$V_{CE}=10\text{V}, I_C=500\text{mA}$	45		
f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}, f=100\text{MHz}$	100		MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		15	pF
C_{ib}	$V_{EB}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		75	pF

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.