

CentralTM Semiconductor Corp.

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

Manufacturers of World Class Discrete Semiconductors

2N5193
2N5194
2N5195

PNP Silicon Transistor
General Purpose Power

JEDEC TO-126 Case

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5193, 2N5194, and 2N5195 are Silicon PNP Epitaxial Base Power Transistors designed for Medium power amplifier and switching applications.

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

	2N5193	2N5194	2N5195
Collector-Base Voltage	40V	60V	80V
Collector-Emitter Voltage	40V	60V	80V
Emitter-Base Voltage		5.0V	
Collector Current, Continuous		4.0A	
Collector Current, Peak		7.0A	
Base Current		1.0A	
Power Dissipation		40W	
Operating & Storage Junction Temperature		-65 to +150°C	
Thermal Resistance, Junction to Case		3.12°C/W	

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	$V_{CB}=\text{Rated } V_{CB}$		100	μA
I_{CEV}	$V_{CE}=\text{Rated } V_{CE0}, V_{EB}=1.5\text{V}$		100	μA
I_{CEO}	$V_{CE}=\text{Rated}$		1.0	mA
I_{EBO}	$V_{EB}=5.0\text{V}$		1.0	mA
BV_{CEO}	$I_C=0.1\text{A}$	40 (2N5193)		V
		60 (2N5194)		V
		80 (2N5195)		V
$V_{CE(s)}$	$I_C=1.5\text{A}, I_B=0.15\text{A}$		0.6	V
$V_{CE(s)}$	$I_C=4.0\text{A}, I_B=1.0\text{A}$		1.2	V
$V_{BE(on)}$	$V_{CE}=2.0\text{V}, I_C=1.5\text{A}$		1.2	V
h_{FE}	$V_{CE}=2.0\text{V}, I_C=1.5\text{A}$	2N5193 25	100	-
		2N5194 25	100	-
		2N5195 20	80	-
h_{FE}	$V_{CE}=2.0\text{V}, I_C=4.0\text{A}$	2N5193 10	80	-
		2N5194 10	-	-
		2N5195 7.0	-	-
f_T	$V_{CE}=10\text{V}, I_C=1.0\text{A}, f=1.0\text{MHz}$	2.0		MHz



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.