

# Central<sup>TM</sup> Semiconductor Corp.

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

Manufacturers of World Class Discrete Semiconductors

2N5415

2N5416

Silicon PNP Transistor

JEDEC TO39 Case

## DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5415 and 2N5416 are Silicon PNP Transistors designed for consumer and industrial line-operated applications.

### MAXIMUM RATINGS ( $T_A = 25\text{ }^\circ\text{C}$ )

		<u>2N5415</u>	<u>2N5416</u>	<u>Unit</u>
Collector-Base Voltage	VCBO	200	350	V
Collector-Emitter Voltage	VCEO	200	300	V
Emitter-Base Voltage	VEBO	4	6	V
Collector Current	IC	1.0	1.0	A
Base Current	IB	0.5	0.5	A
Power Dissipation	PT	1.0	1.0	W
Operating Temperature	TJ	-65 to 200		$^\circ\text{C}$
Storage Temperature	Tstg	-65 to 200		$^\circ\text{C}$

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

<u>Symbol</u>	<u>Test Conditions</u>	<u>Min</u>	<u>Max</u>	<u>Unit</u>
<u>2N5415</u>				
ICBO	VCB = 175V		50	$\mu\text{A}$
ICEV	VCE = 200V, VEB = 1.5V		50	$\mu\text{A}$
ICEO	VCE = 150V		50	$\mu\text{A}$
IEBO	VEB = 4.0V		20	$\mu\text{A}$
VCEO	IC = 50mA	200		V
VCE(s)	IC = 50mA, IB = 5mA		2.5	V
VBE(s)	IC = 50mA, IB = 5mA		1.5	V
hFE	VCE = 10V, IC = 50mA	30	150	-
<u>2N5416</u>				
ICBO	VCB = 280V		50	$\mu\text{A}$
ICEV	VCE = 300V, VEB = 1.5V		50	$\mu\text{A}$
ICEO	VCE = 250V		50	$\mu\text{A}$
IEBO	VEB = 6.0V		20	$\mu\text{A}$
VCER	IC = 50mA, RBE = 50 ohms	350		V
VCEO	IC = 50mA	300		V
VCE(s)	IC = 50mA, IB = 5mA		2.0	V
VBE(s)	IC = 50mA, IB = 5mA		1.5	V
hFE	VCE = 10V, IC = 50mA	30	120	-