

CentralTM Semiconductor Corp.

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

Manufacturers of World Class Discrete Semiconductors

2N3414	MPS3414
2N3415	MPS3415
2N3416	MPS3416
2N3417	MPS3417

NPN SILICON TRANSISTOR

JEDEC TO-92 CASE*

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3414, MPS3414 series types are silicon NPN planar epitaxial transistors designed for small signal general purpose and switching applications.

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

	SYMBOL	2N3414 MPS3414	2N3415 MPS3415	2N3416 MPS3416	2N3417 MPS3417	UNIT
Collector-Base Voltage	VCBO		25		50	V
Emitter-Base Voltage	VEBO		5.0		5.0	V
Collector-Emitter Voltage	VCEO		25		50	V
Collector Current-Continuous	IC			500		mA
Power Dissipation	PD			625		mW
Power Dissipation (TC=25°C)	PD			1.5		W
Operating and Storage Junction Temperature	TJ, TSTG			-65 TO +150		°C

ELECTRICAL CHARACTERISTICS (TA=25°C)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
ICBO	VCB=25V (3414, 3415)		100	nA
ICBO	VCB=50V (3416, 3417)		100	nA
IEBO	VEB=5.0V		100	nA
VCE(SAT)	IC=50mA, IB=3.0mA		0.3	V
VBE(SAT)	IC=50mA, IB=3.0mA		0.85	V
hFE	VCE=4.5V, IC=2.0mA (3414, 3416)	75	225	
hFE	VCE=4.5V, IC=2.0mA (3415, 3417)	180	540	

*2N3414 thru 2N3417: ECB LEAD CODE

*MPS3414 thru MPS3417: EBC LEAD CODE

