# Central Market Corp.

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

Manufacturers of World Class Discrete Semiconductors

CENW42 CENW43

NPN SILICON TRANSISTOR

JEDEC TO-237 CASE (EBC)

### DESCRIPTION

The CENTRAL SEMICONDUCTOR CENW42, CENW43 types are silicon NPN epitaxial planar transistors mounted in an epoxy case designed for high voltage amplifier applications. This series is an electrical equivalent to the MPSW42, MPSW43 types.

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

	SYMBOL	CENW42	CENW43	UNIT
Collector-Emitter Voltage	V <sub>CEO</sub>	300	200	٧
Collector-Base Voltage	V <sub>CBO</sub>	300	200	V
Emitter-Base Voltage Collector Current	$V_{EBO}$	6.	0	٧
	<u>l</u> c	500		mA
Power Dissipation	PD	1.	•	W
Power Dissipation (T <sub>C</sub> =25°C)	P <sub>D</sub>	2.	•	W
Operating and Storage Junction Temperature	¹J, ¹STG	-65 TO	+150	°C
Thermal Resistance	ΘJC	5	0	°C/W
Thermal Resistance	$\Theta_{JA}$	12	5	°C/W

### ELECTRICAL CHARACTERISTICS (TA=25°C)

		CEN	W42	CENV	143	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNIT
I <sub>CBO</sub>	V <sub>CB</sub> =200V		0.1		_	μА
ГСВО	V <sub>CB</sub> =160V		-		0.1	μA
1 <sub>EBO</sub>	V <sub>EB</sub> =6.0V		0.1		-	μA
<sup>l</sup> EBO	V <sub>EB</sub> =4.0V		-		0.1	μA
BVCEO	I <sub>C</sub> =1.0mA	300		200		V
BVCBO	$I_{C}=100\mu A$	300		200		V
BVEBO	I <sub>E</sub> =100μA	6.0		6.0		V
VCE(SAT)	I <sub>C</sub> =20mA, I <sub>B</sub> =2.0mA		0.5		0.5	٧
VBE (SAT)	I <sub>C</sub> =20mA, I <sub>B</sub> =2.0mA		0.9		0.9	V
hFE	$V_{CE}=10V$ , $I_{C}=1.0mA$	25	_	25	_	-
hFE	$V_{CE}=10V$ , $I_{C}=10mA$	40	-	40	_	
hFE	$V_{CE}=10V$ , $I_{C}=30mA$	40	-	40	.=	
fŢ	V <sub>CE</sub> =20V, I <sub>C</sub> =10mA, f=20MHz	50	_	<b>5</b> 0	_	MHz
Cop	$V_{CB}=20V$ , $I_{E}=0$ , $f=1.0MHz$	-	3.0	-	4.0	pF

#### **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



#### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

#### **DESIGNER SUPPORT/SERVICES**

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- · Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

#### REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

#### **CONTACT US**

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)



### Product End of Life Notification

PDN ID:	PDN01004
Notification Date:	10/01/15
Last Buy Date:	4/01/16
Last Shipment Date	10/01/16

Summary: All transistors manufactured in the TO-237 package are discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by various manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

	Central Part Number	Replacement
	CENW01	CEN-U01A
	CENW01A	CEN-U01A
	CENW05	CEN-U05
	CENW06	CEN-U06
	CENW07	CEN-U07
	CENW10	CEN-U10
	CENW13	MPSA13
	CENW13 TRA	MPSA13
	CENW14	MPSA14
	CENW42	MPSA42
	CENW42 TRA	MPSA42
	CENW42 TRC	MPSA42
	CENW42 TRE	MPSA42
	CENW51	CEN-U51A
	CENW51A	CEN-U51A
	CENW55	CEN-U55
	CENW56	CEN-U56
	CENW57	CEN-U57
	CENW60	CEN-U60
	CENW63	MPSA63
	CENW64	MPSA64
	CENW64-5	MPSA64
	CENW751	MPS751
	CENW92	MPSA92
	CENW92 TRA	MPSA92
	CENW92 TRE	MPSA92
	CEN1299	N/A
	CEN940	N/A
	TN2102	2N2102
	TN2219A	2N2219A
	TN2219A-5	2N2219A
	TN2905A	2N2905A
	TN2905A-5	2N2905A
	TN3019	2N3019
	TN3019-5	2N3019
	TN3019A	2N3019
	TN3020	2N3020
	TN3053	2N3053
<b>*</b> :	** CONTINUED ***	

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.

CCC785 REV 002



## Product End of Life Notification

PDN ID:	PDN01004
Notification Date:	10/01/15
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Control Port Northern Ports around			
Central Part Number TN3724	Replacement N/A		
2N6714	MPS650		
2N6715	MPS650		
2N6715 TRE	MPS650		
2N6715-18	MPS650		
2N6716	MPS651		
2N6716 APM	MPS651		
2N6716 APP	MPS651		
2N6716 TRE	MPS651		
2N6717	MPS651		
2N6717 TRE	MPS651		
2N6718	MPS651		
2N6718 APM	MPS651		
2N6718 TRE	MPS651		
2N6718-5T	MPS651		
2N6719	N/A		
2N6719 TRA	N/A		
2N6719 TRC	N/A		
2N6719 TRE	N/A		
2N6719-5T	N/A		
2N6720	N/A		
2N6721	N/A		
2N6722	N/A		
2N6723	N/A		
2N6724	N/A		
2N6724 TRA	N/A		
2N6724-18	N/A		
2N6725	N/A		
2N6726	MPS650		
2N6727	MPS750		
2N6727 TRE	MPS750		
2N6728	MPS751		
2N6729	MPS751		
2N6729 APP	MPS751		
2N6730	MPS751		
2N6730 APP	MPS751		
2N6730 TRE	MPS751		
2N6730-5T	MPS751		
2N6731	N/A		
2N6732	N/A		
2N6733	N/A		
2N6734	N/A		
2N6735	N/A		
**			

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\*\*\* CONTINUED FROM PRIOR PAGE \*\*\*

Central Part Number	Replacement	
Central would be happy to assist yo	ou by providing additional information or technical data to help locate an alternate source if w	⁄е
have no replacement available. Plea	ase email your requests to engineering@centralsemi.com.	

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