

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

145 Adams Ave., Hauppauge, NY 11788 USA  
Phone (631) 435-1110 FAX (631) 435-1824

Manufacturers of World Class Discrete Semiconductors  
www.centrasemi.com

CN645 THRU CN649

GLASS PASSIVATED JUNCTION  
GENERAL PURPOSE DIODE

DO-41SP CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR CN645 Series types are Glass Passivated Junction general-purpose diodes, which are well constructed, highly reliable components designed for use in all types of commercial, industrial, entertainment, computer and automotive applications.

## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

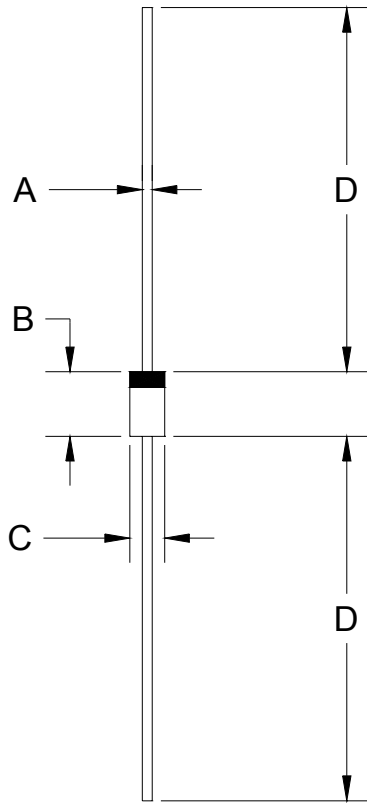
	SYMBOL	CN645	CN646	CN647	CN648	CN649	UNITS
Peak Working Reverse Voltage	V <sub>RWM</sub>	225	300	400	500	600	V
Average Forward Current	I <sub>O</sub>			400			mA
Average Forward Current (T <sub>A</sub> =150°C)	I <sub>O</sub>			150			mA
Peak Forward Surge Current	I <sub>FSM</sub>			3.0			A
Power Dissipation	P <sub>D</sub>			600			mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>			-65 to 150			°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	CN645		CN646		CN647		CN648		CN649		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
V <sub>BR</sub>	I <sub>R</sub> =100μA, T <sub>A</sub> =100°C	275		360		480		600		720		V
I <sub>R</sub>	V <sub>R</sub> =RATED V <sub>RWM</sub> , T <sub>A</sub> =100°C		15		15		20		20		25	μA
I <sub>R</sub>	V <sub>R</sub> =RATED V <sub>RWM</sub>		0.2		0.2		0.2		0.2		0.2	μA
V <sub>F</sub>	I <sub>F</sub> =400mA		1.0		1.0		1.0		1.0		1.0	V
C <sub>T</sub>	V <sub>R</sub> =12V, f=1.0MHz		11 TYP		11 TYP		11 TYP		11 TYP		11 TYP	pF

(SEE REVERSE SIDE)

DO-41SP PACKAGE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.021	0.025	0.53	0.64
B	0.160	0.205	4.06	5.21
C	0.080	0.107	2.03	2.72
D	1.000	-	25.40	-

DO-41SP (REV: R1)

R1

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