

CentralTM Semiconductor Corp.

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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.

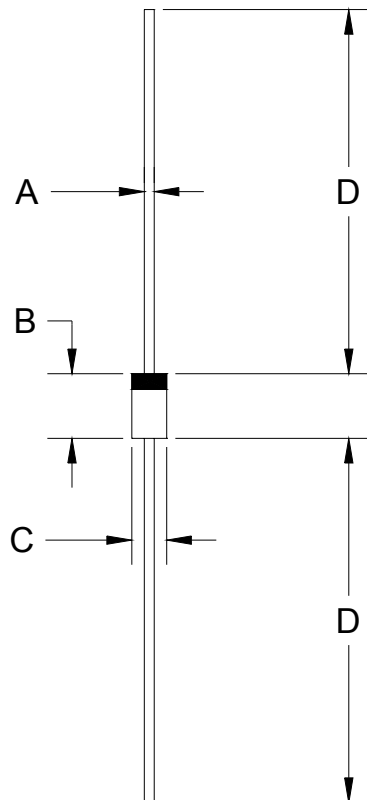
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

| | SYMBOL | CN645 | CN646 | CN647 | CN648 | CN649 | UNITS |
|---|----------------|-------|-------|------------|-------|-------|------------------|
| Peak Working Reverse Voltage | V_{RWM} | 225 | 300 | 400 | 500 | 600 | V |
| Average Forward Current | I_O | | | 400 | | | mA |
| Average Forward Current ($T_A=150^\circ\text{C}$) | I_O | | | 150 | | | mA |
| Peak Forward Surge Current | I_{FSM} | | | 3.0 | | | A |
| Power Dissipation | P_D | | | 600 | | | mW |
| Operating and Storage Junction Temperature | T_J, T_{stg} | | | -65 to 150 | | | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | CN645 | | CN646 | | CN647 | | CN648 | | CN649 | | UNITS |
|----------|--|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|---------------|
| | | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | |
| V_{BR} | $I_R=100\mu\text{A}, T_A=100^\circ\text{C}$ | 275 | | 360 | | 480 | | 600 | | 720 | | V |
| I_R | $V_R=\text{RATED } V_{RWM}, T_A=100^\circ\text{C}$ | 15 | | 15 | | 20 | | 20 | | 25 | | μA |
| I_R | $V_R=\text{RATED } V_{RWM}$ | 0.2 | | 0.2 | | 0.2 | | 0.2 | | 0.2 | | μA |
| V_F | $I_F=400\text{mA}$ | 1.0 | | 1.0 | | 1.0 | | 1.0 | | 1.0 | | V |
| C_T | $V_R=12\text{V}, f=1.0\text{MHz}$ | 11 TYP | | 11 TYP | | 11 TYP | | 11 TYP | | 11 TYP | | pF |

(SEE REVERSE SIDE)

DO-41SP PACKAGE - MECHANICAL OUTLINE

| DIMENSIONS | | | | |
|------------|--------|-------|-------------|------|
| 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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