



**THE DATASHEET OF  
CMXD4448 TR PBFREE**



CMXD4448

**SURFACE MOUNT  
TRIPLE ISOLATED  
HIGH SPEED  
SILICON SWITCHING DIODES**



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMXD4448 type contains three (3) Isolated High Speed Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, and designed for applications requiring high speed switching.

**SUPERmini™**



**SOT-26 CASE**

**MARKING CODE: X48**

**MAXIMUM RATINGS: (T<sub>A</sub>=25°C)**

Continuous Reverse Voltage  
 Peak Repetitive Reverse Voltage  
 Continuous Forward Current  
 Peak Repetitive Forward Current  
 Peak Forward Surge Current, t<sub>p</sub>=1.0μs  
 Peak Forward Surge Current, t<sub>p</sub>=1.0s  
 Power Dissipation  
 Operating and Storage Junction Temperature  
 Thermal Resistance

**SYMBOL**

V<sub>R</sub> 75  
 V<sub>RRM</sub> 100  
 I<sub>F</sub> 250  
 I<sub>FRM</sub> 500  
 I<sub>FSM</sub> 4.0  
 I<sub>FSM</sub> 1.0  
 P<sub>D</sub> 350  
 T<sub>J</sub>, T<sub>stg</sub> -65 to +150  
 Θ<sub>JA</sub> 357

**UNITS**

V  
 V  
 mA  
 mA  
 A  
 A  
 mW  
 °C  
 °C/W

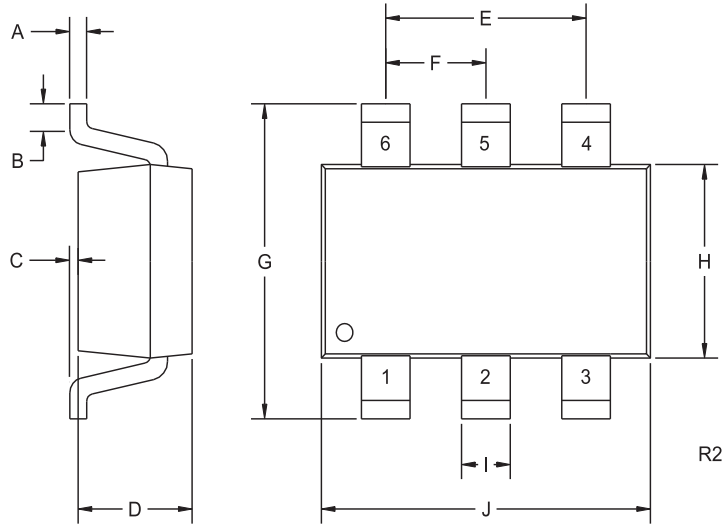
**ELECTRICAL CHARACTERISTICS PER DIODE: (T<sub>A</sub>=25°C unless otherwise noted)**

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =20V		25	nA
BV <sub>R</sub>	I <sub>R</sub> =5.0μA	75		V
BV <sub>R</sub>	I <sub>R</sub> =100μA	100		V
V <sub>F</sub>	I <sub>F</sub> =100mA		1.0	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1.0MHz		4.0	pF
t <sub>rr</sub>	I <sub>R</sub> =I <sub>F</sub> =10mA, I <sub>rr</sub> =1.0mA, R <sub>L</sub> =100Ω		4.0	ns

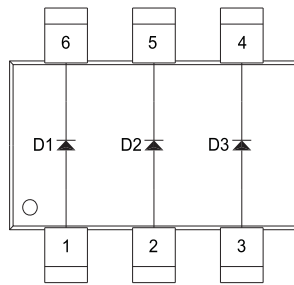
**CMXD4448**  
**SURFACE MOUNT**  
**TRIPLE ISOLATED**  
**HIGH SPEED**  
**SILICON SWITCHING DIODES**



**SOT-26 CASE - MECHANICAL OUTLINE**



**PIN CONFIGURATION**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016		0.41	
J	0.110	0.118	2.80	3.00

SOT-26 (REV: R2)

**LEAD CODE:**

- 1) Anode D1
- 2) Anode D2
- 3) Anode D3
- 4) Cathode D3
- 5) Cathode D2
- 6) Cathode D1

**MARKING CODE: X48**

R5 (12-February 2010)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick 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

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### 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).

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### CONTACT US

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## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management