

CMKD4448

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



www.centrasemi.com

ULTRAmimi™



SOT-363 CASE

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKD4448 type contains three (3) Isolated High Speed Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in an ULTRAmimi™ surface mount package, designed for applications requiring high speed switching applications.

**MARKING CODE: K48**

**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, tp=1.0µs  
Peak Forward Surge Current, tp=1.0s  
Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

**SYMBOL**

V<sub>R</sub> 75  
V<sub>R</sub>RM 100  
I<sub>F</sub> 250  
I<sub>F</sub>RM 500  
I<sub>F</sub>SM 4.0  
I<sub>F</sub>SM 1.0  
P<sub>D</sub> 325  
T<sub>J</sub>, T<sub>stg</sub> -65 to +175  
θ<sub>JA</sub> 461

**UNITS**

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

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

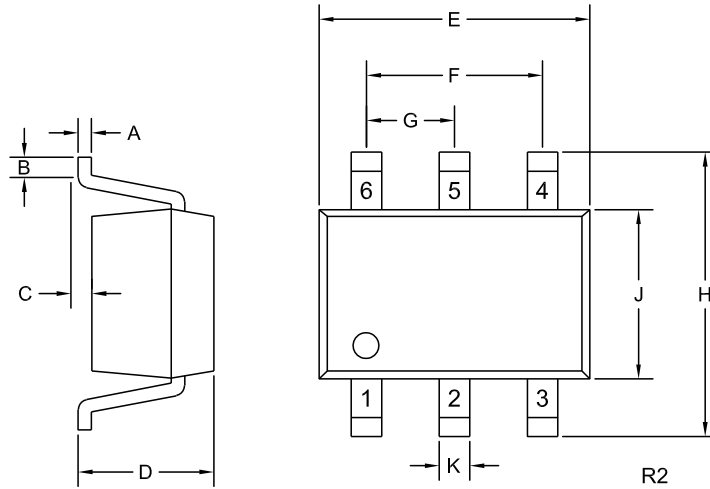
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =20V		25	nA
BV <sub>R</sub>	I <sub>R</sub> =5.0µA	75		V
BV <sub>R</sub>	I <sub>R</sub> =100µA	100		V
V <sub>F</sub>	I <sub>F</sub> =100mA		1.0	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1.0MHz		4.0	pF
t <sub>rr</sub>	I <sub>R</sub> =I <sub>F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

CMKD4448

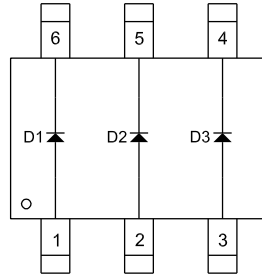
**SURFACE MOUNT  
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SWITCHING DIODES**



**SOT-363 CASE - MECHANICAL OUTLINE**



**PIN CONFIGURATION**



**LEAD CODE:**

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

**MARKING CODE: K48**

**DIMENSIONS**

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.010	0.10	0.25
B	0.005	-	0.12	-
C	0.000	0.004	0.00	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.075	0.091	1.90	2.30
J	0.043	0.055	1.10	1.40
K	0.006	0.012	0.15	0.30

SOT-363 (REV: R2)

R6 (19-September 2011)

## 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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### CONTACT US

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