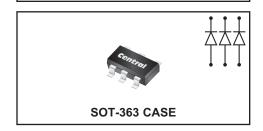


SURFACE MOUNT SILICON TRIPLE ISOLATED HIGH VOLTAGE SCHOTTKY DIODE



#### FEATURES:

t<sub>rr</sub>

- Meets Galvanic Isolation
- Requirements of IEEE 1394
- High Voltage (70V)



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# DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMKD6263 contains three (3) galvanically isolated, high voltage Silicon Schottky diodes, epoxy molded in a SOT-363 surface mount package. This ULTRAmini™ device has been designed for fast switching applications requiring a low forward voltage drop.

## MARKING CODE: K63

• Requires less board space than 3 individual diodes

5.0

Low Forward Voltage

| MAXIMUM RATINGS: (T <sub>A</sub> =25°C)    | SYMBOL               |             | UNITS |
|--------------------------------------------|----------------------|-------------|-------|
| Peak Repetitive Reverse Voltage            | V <sub>RRM</sub>     | 70          | V     |
| Continuous Forward Current                 | ١ <sub>F</sub>       | 15          | mA    |
| Peak Forward Surge Current, tp=1.0s        | IFSM                 | 50          | mA    |
| Power Dissipation                          | PD                   | 250         | mW    |
| Operating and Storage Junction Temperature | TJ, T <sub>stg</sub> | -65 to +150 | °C    |
| Thermal Resistance                         | $\Theta_{JA}$        | 500         | °C/W  |

| ELECTRICAL CHARACTERISTICS PER DIODE: (T <sub>A</sub> =25°C unless otherwise noted) |                             |     |     |     |       |  |  |
|-------------------------------------------------------------------------------------|-----------------------------|-----|-----|-----|-------|--|--|
| SYMBOL                                                                              | TEST CONDITIONS             | MIN | TYP | MAX | UNITS |  |  |
| I <sub>R</sub>                                                                      | V <sub>R</sub> =50V         |     | 10  | 200 | nA    |  |  |
| BVR                                                                                 | I <sub>R</sub> =10µA        | 70  |     |     | V     |  |  |
| VF                                                                                  | I <sub>F</sub> =1.0mA       |     | 395 | 410 | mV    |  |  |
| CJ                                                                                  | V <sub>R</sub> =0, f=1.0MHz |     |     | 2.0 | pF    |  |  |

 $I_R=I_F=10mA$ ,  $I_{rr}=1.0mA$ ,  $R_L=100\Omega$ 

R5 (11-December 2015)

ns



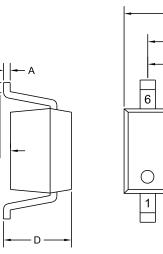


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R2

#### SURFACE MOUNT SILICON **TRIPLE ISOLATED** HIGH VOLTAGE SCHOTTKY DIODE

С-



# • E -

G

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3

SOT-363 CASE - MECHANICAL OUTLINE

#### DIMENSIONS INCHES MILLIMETERS SYMBOL MIN MAX MIN MAX 0.004 0.010 0.10 0.25 А В 0.005 0.12 --С 0.000 0.004 0.00 0.10 0.031 0.043 0.80 1.10 D 0.071 0.087 2.20 Е 1.80 F 0.051 1.30 G 0.026 0.65 0.075 0.091 1.90 2.30 Н 0.043 0.055 1.10 1.40 0.006 0.012 0.15 0.30 Κ

SOT-363 (REV: R2)

D1 D2 D3 📥 0 2 1 LEAD CODE: 1) Anode D1

6

**PIN CONFIGURATION** 

5

4

3

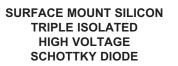
2) Anode D2 3) Anode D3 4) Cathode D3 5) Cathode D2 6) Cathode D1

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#### Leakage Current Forward Voltage 100,000 100 -T<sub>A</sub>=125°C l<sub>F</sub>, Forward Current (mA) I<sub>R</sub>, Reverse Current (nA) 10,000 10 -Γ<sub>Δ</sub>=125°C 1,000 TA=75°C T<sub>A</sub>=25°C 100 0.1 T<sub>A</sub>=25°C 10 0.01 T<sub>A</sub>=-40°C 0.001 -1 0 400 500 600 700 800 900 1000 ò 10 20 30 40 50 60 70 100 200 300 V<sub>R</sub>, Reverse Voltage (V) V<sub>F</sub>, Forward Voltage (mV) Capacitance Forward Dynamic Impedance 10 1000 Z<sub>D</sub>, Dynamic Impedance (Ohms) C, Capacitance (pF) 100 Ш T<sub>A</sub>=25°C f=1.0MHz T<sub>A</sub>=25℃ 0.1 10 + 0.1 10 100 10 100 IF, Forward Current (mA) V<sub>R</sub>, Reverse Voltage (V)

### TYPICAL ELECTRICAL CHARACTERISTICS

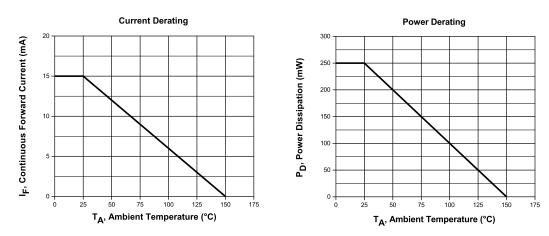
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SURFACE MOUNT SILICON TRIPLE ISOLATED HIGH VOLTAGE SCHOTTKY DIODE



### TYPICAL ELECTRICAL CHARACTERISTICS

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- Application notes
- Application and design sample kits
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#### CONTACT US

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