

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



# FEATURES:

- 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

• 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> =10μΑ	70			V			
VF	I <sub>F</sub> =1.0mA		395	410	mV			
СJ	V <sub>R</sub> =0, f=1.0MHz			2.0	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			5.0	ns			

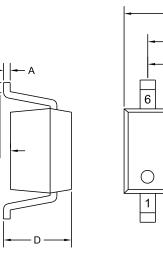
R5 (11-December 2015)



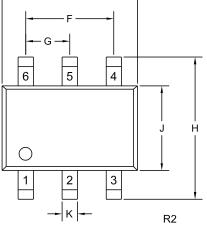


# SURFACE MOUNT SILICON TRIPLE ISOLATED HIGH VOLTAGE SCHOTTKY DIODE

С-

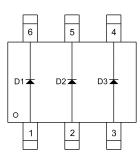


SOT-363 CASE - MECHANICAL OUTLINE



- E -

#### **PIN CONFIGURATION**



#### LEAD CODE:

Anode D1
Anode D2
Anode D3
Cathode D3
Cathode D2
Cathode D2
Cathode D1

MARKING CODE: K63

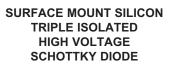
DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
А	0.004	0.010	0.10	0.25		
В	0.005	-	0.12	-		
С	0.000	0.004	0.00	0.10		
D	0.031	0.043	0.80	1.10		
Е	0.071	0.087	1.80	2.20		
F	0.051		1.30			
G	0.026		0.65			
Н	0.075	0.091	1.90	2.30		
J	0.043	0.055	1.10	1.40		
K	0.006	0.012	0.15	0.30		
SOT-363 (REV: R2)						

SOT-363 (REV: R2)

R5 (11-December 2015)

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#### Leakage Current Forward Voltage 100,000 100 -T<sub>A</sub>=125°C I<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 + 10 100 10 100 IF, Forward Current (mA) V<sub>R</sub>, Reverse Voltage (V)

# TYPICAL ELECTRICAL CHARACTERISTICS

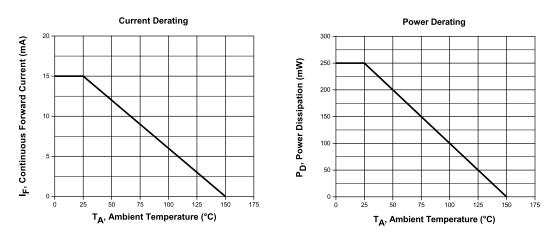
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# TYPICAL ELECTRICAL CHARACTERISTICS

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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

#### **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

· Custom product packing

- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

Custom product and package development

## **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).
- If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

### CONTACT US

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