## SURFACE MOUNT SILICON HIGH VOLTAGE SCHOTTKY DIODE



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## **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMAD6263 is a high voltage Schottky diode designed for applications where very small size and operational efficiency are prime requirements.

**MARKING CODE: J** 



SOD-923 CASE

## **APPLICATIONS:**

- DC-DC Converters
- Voltage Clamping
- Protection Circuits
- Battery powered applications including Cell Phones, Digital Cameras, Pagers, PDAs, Laptop, Computers, etc.

## **FEATURES:**

- Current (I<sub>E</sub>=15mA)
- Low Forward Voltage Drop (V<sub>F</sub>=0.395V TYP @ 1.0mA)
- Low Reverse Current (98nA TYP @ 50V)
- Extremely Fast Switching (5ns Max)
- Miniture, 0.8 x 0.6 x 0.4mm, ultra low height profile Surface Mount Package.

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	70	V
Continuous Forward Current	Ι <sub>Ε</sub>	15	mA
Peak Forward Surge Current, tp=1.0s	I <sub>FSM</sub>	50	mA
Power Dissipation	$P_{D}$	100	mW
Operating Junction Temperature	TJ	-65 to +125	°C
Storage Temperature	T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	1000	°C/W

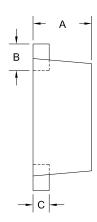
# **ELECTRICAL CHARACTERISTICS:** $(T_A=25^{\circ}C)$

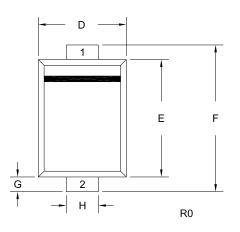
SYMBOL	IEST CONDITIONS	MIN	IYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =50V		10	200	nA
$BV_R$	I <sub>R</sub> =10μA	70			V
$V_{F}$	I <sub>F</sub> =1.0mA		395	410	mV
CJ	V <sub>R</sub> =0, f=1.0MHz			2.0	pF
t <sub>rr</sub>	$I_R = I_F = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ Ω			5.0	ns

# SURFACE MOUNT SILICON HIGH VOLTAGE SCHOTTKY DIODE



# **SOD-923 CASE - MECHANICAL OUTLINE**





# LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: J

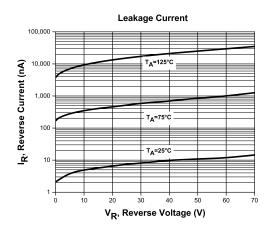
DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.015	0.016	0.39	0.41			
В	0.004	0.010	0.10	0.26			
С	0.003	0.006	0.08	0.14			
D	0.022	0.026	0.55	0.65			
Е	0.030	0.033	0.75	0.85			
F	0.035	0.043	0.90	1.10			
G	0.002	0.006	0.05	0.15			
Н	0.007	0.011	0.17	0.27			

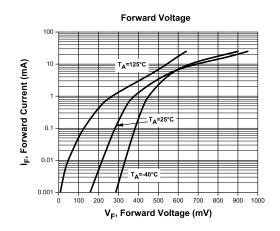
SOD-923 (REV: R0)

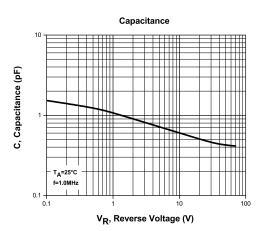


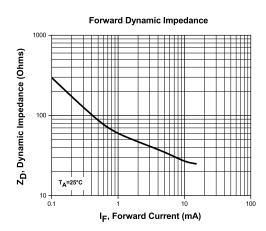


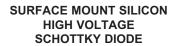
## TYPICAL ELECTRICAL CHARACTERISTICS





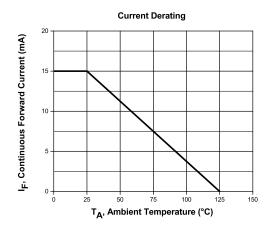


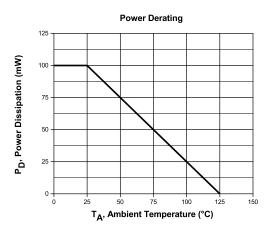






## TYPICAL ELECTRICAL CHARACTERISTICS





#### **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



#### 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

#### **DESIGNER SUPPORT/SERVICES**

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

- Free guick 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

#### 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).

#### **CONTACT US**

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