

## **Excellent Integrated System Limited**

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

Central Semiconductor Corp CMAD6001 TR

For any questions, you can email us directly: sales@integrated-circuit.com

# Distributor of Central Semiconductor Corp: Excellent Integrated System Limited Datasheet of CMAD6001 TR - DIODE GEN PURP 75V 250MA SOD923

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

#### **CMAD6001**

SURFACE MOUNT
ULTRA LOW LEAKAGE SILICON
SWITCHING DIODE



www.centralsemi.com

#### **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMAD6001 is an ultra low leakage switching diode ideal for applications where very small size and operational efficiency are prime requirements.

**MARKING CODE: Q** 





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>=250mA)
- Forward Voltage Drop (V<sub>F</sub>=1.1V MAX @ 100mA)
- Low Reverse Current (500pA MAX @ 75V)
- Miniature, 0.8 x 0.6 x 0.4mm, ultra low height profile FEMTOmini™ Surface Mount Package.

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	$V_{R}$	75	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Continuous Forward Current	I <sub>F</sub>	250	mA
Peak Forward Surge Current, tp=1.0µs	I <sub>FSM</sub>	4.0	Α
Peak Forward Surge Current, tp=1.0s	I <sub>FSM</sub>	1.0	Α
Power Dissipation	$P_{D}$	100	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	ΘιΛ	1250	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_{R}$	V <sub>R</sub> =75V		500	pA
$BV_R$	I <sub>R</sub> =100μA	100		V
$V_{F}$	I <sub>F</sub> =1.0mA		0.85	V
$V_{F}$	I <sub>F</sub> =10mA		0.95	V
$V_{F}$	I <sub>F</sub> =100mA		1.1	V
c <sub>T</sub>	V <sub>R</sub> =0, f=1.0MHz		2.0	pF
t <sub>rr</sub>	$I_R = I_F = 10$ mA, $R_L = 100\Omega$ Rec. to 1.0mA		3.0	μs

R1 (8-January 2010)

### Distributor of Central Semiconductor Corp: Excellent Integrated System Limited

Datasheet of CMAD6001 TR - DIODE GEN PURP 75V 250MA SOD923

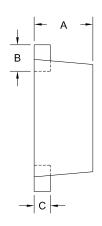
Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

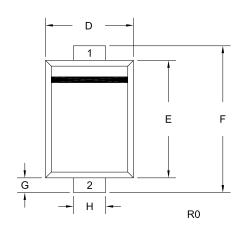
#### **CMAD6001**

SURFACE MOUNT
ULTRA LOW LEAKAGE SILICON
SWITCHING DIODE



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





LEAD CODE: 1) CATHODE 2) ANODE

MARKING CODE: Q

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			
E	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)

## Distributor of Central Semiconductor Corp: Excellent Integrated System Limited

Datasheet of CMAD6001 TR - DIODE GEN PURP 75V 250MA SOD923

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

#### **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 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

#### **CONTACT US**

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com