CMPD1001 CMPD1001A CMPD1001S

SURFACE MOUNT HIGH CURRENT SILICON SWITCHING DIODE



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD1001 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for applications requiring high current capability.



The following configurations are available:

CMPD1001	SINGLE	MARKING CODE: L20
CMPD1001A	DUAL, COMMON ANODE	MARKING CODE: L22
CMPD1001S	DUAL, IN SERIES	MARKING CODE: L21

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	v_R	90	V
Continuous Forward Current	I _F	250	mA
Peak Repetitive Forward Current	I _{FRM}	600	mA
Peak Repetitive Reverse Current	I _{RRM}	600	mA
Peak Forward Surge Current, tp=1.0µs	I _{FSM}	6.0	Α
Peak Forward Surge Current, tp=1.0s	I _{FSM}	1.0	Α
Power Dissipation	P_{D}	350	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	357	°C/W

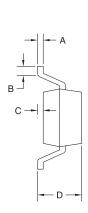
ELECTRICA	AL CHARACTERISTICS PER DIODE: (T _A =25°	°C unless otherwise noted)	
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{R}	V _R =90V		100	nA
I_{R}	V _R =90V, T _A =150°C		100	μΑ
BV_R	I _R =100μA	90		V
V_{F}	I _F =10mA		0.75	V
V_{F}	I _F =50mA		0.84	V
V_{F}	I _F =100mA		0.90	V
V_{F}	I _F =200mA		1.00	V
V_{F}	I _F =400mA		1.25	V
C_T	V _R =0, f=1.0MHz		35	pF
t _{rr}	$I_R=I_F=30$ mA, Rec. to 3.0mA, $R_L=100\Omega$		50	ns

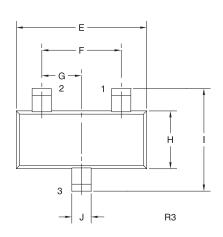
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SOT-23 CASE - MECHANICAL OUTLINE

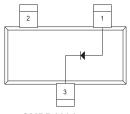




DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
Α	0.003	0.007	0.08	0.18	
В	0.006	-	0.15	-	
С	-	0.005	-	0.13	
D	0.035	0.043	0.89	1.09	
Е	0.110	0.120	2.80	3.05	
F	0.075		1.90		
G	0.037		0.95		
Н	0.047	0.055	1.19	1.40	
	0.083	0.098	2.10	2.49	
J	0.014	0.020	0.35	0.50	

SOT-23 (REV: R3)

PIN CONFIGURATIONS

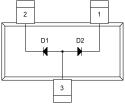


CMPD1001

LEAD CODE:

- 1) Anode
- 2) No Connection
- 3) Cathode

MARKING CODE: L20

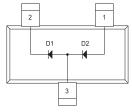


CMPD1001A

LEAD CODE:

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, Anode D2

MARKING CODE: L22



CMPD1001S

LEAD CODE:

- 1) Anode D2
- 2) Cathode D1
- 3) Anode D1, Cathode D2

MARKING CODE: L21

R6 (25-January 2010)

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 (2nd 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

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