

CMPD3003
CMPD3003A
CMPD3003C
CMPD3003S

**SURFACE MOUNT SILICON
LOW LEAKAGE
SWITCHING DIODES**



SOT-23 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD3003 series devices are silicon switching diodes manufactured by the epitaxial planar process, designed for switching applications requiring an extremely low leakage diode.

The following configurations are available:

CMPD3003 SINGLE
CMPD3003A DUAL, COMMON ANODE
CMPD3003C DUAL, COMMON CATHODE
CMPD3003S DUAL, IN SERIES

MARKING CODE: LLO

MARKING CODE: LLA

MARKING CODE: LLC

MARKING CODE: LLS

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Continuous Reverse Voltage
Average Forward Current
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Peak Forward Surge Current, $t_p=1.0\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_R 180
 I_O 200
 I_F 600
 I_{FRM} 700
 I_{FSM} 2.0
 I_{FSM} 1.0
 P_D 350
 T_J, T_{stg} -65 to +150
 θ_{JA} 357

UNITS

V
mA
mA
mA
A
A
mW
 $^\circ\text{C}$
 $^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=125\text{V}$		1.0	nA
I_R	$V_R=125\text{V}, T_A=150^\circ\text{C}$		3.0	μA
I_R	$V_R=180\text{V}$		10	nA
I_R	$V_R=180\text{V}, T_A=150^\circ\text{C}$		5.0	μA
BV_R	$I_R=5.0\mu\text{A}$	200		V
V_F	$I_F=1.0\text{mA}$	0.62	0.72	V
V_F	$I_F=10\text{mA}$	0.72	0.83	V
V_F	$I_F=50\text{mA}$	0.80	0.89	V
V_F	$I_F=100\text{mA}$	0.83	0.93	V
V_F	$I_F=200\text{mA}$	0.87	1.10	V
V_F	$I_F=300\text{mA}$	0.90	1.15	V
C_J	$V_R=0, f=1.0\text{MHz}$		4.0	pF

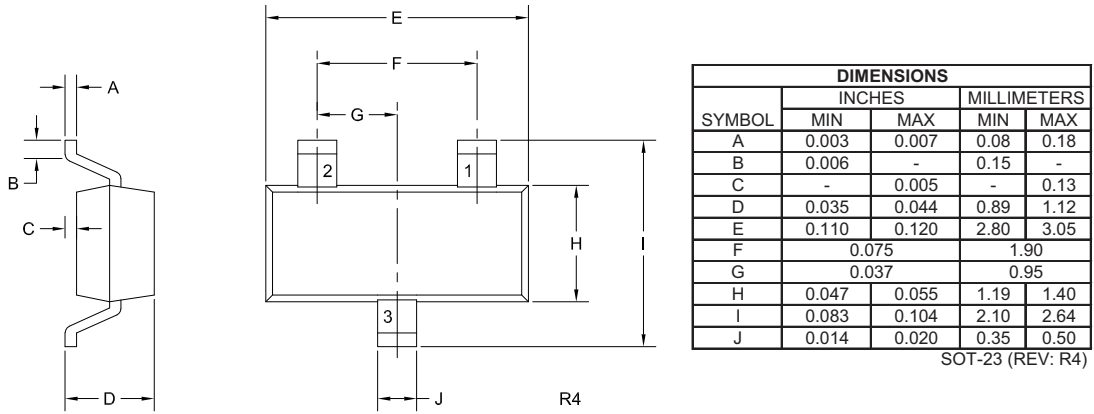
R5 (14-September 2020)

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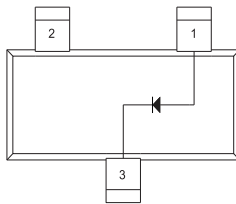
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SOT-23 CASE - MECHANICAL OUTLINE



PIN CONFIGURATIONS

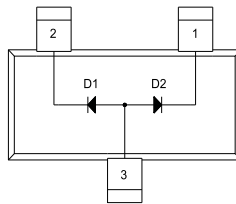


CMPD3003

LEAD CODE:

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

MARKING CODE: LLO

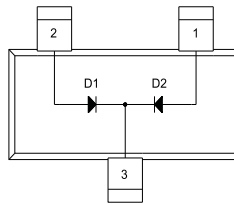


CMPD3003A

LEAD CODE:

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

MARKING CODE: LLA

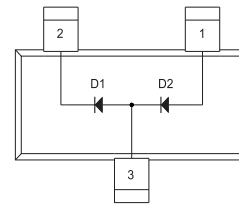


CMPD3003C

LEAD CODE:

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

MARKING CODE: LLC



CMPD3003S

LEAD CODE:

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

MARKING CODE: LLS

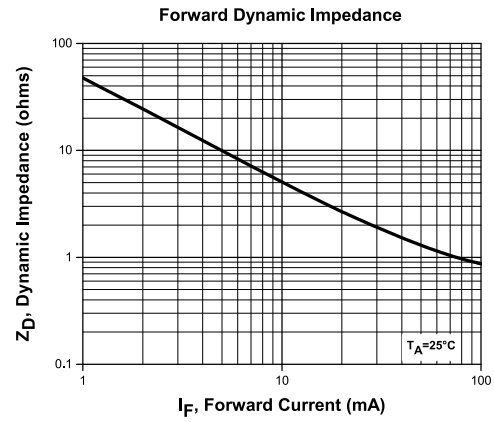
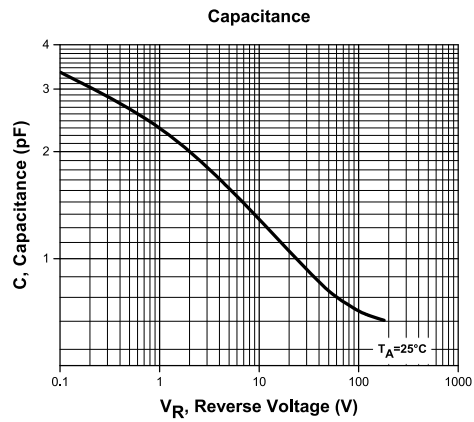
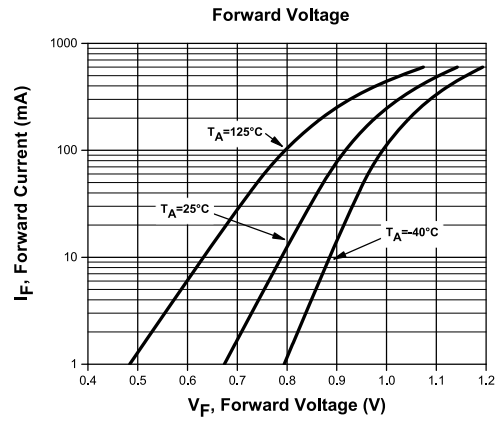
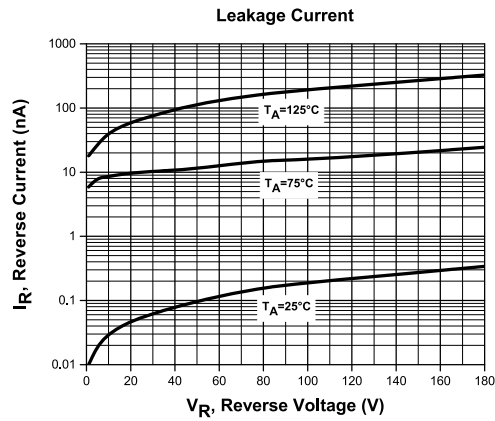
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TYPICAL ELECTRICAL CHARACTERISTICS



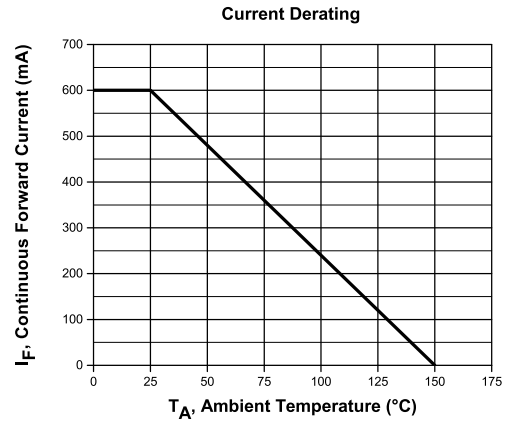
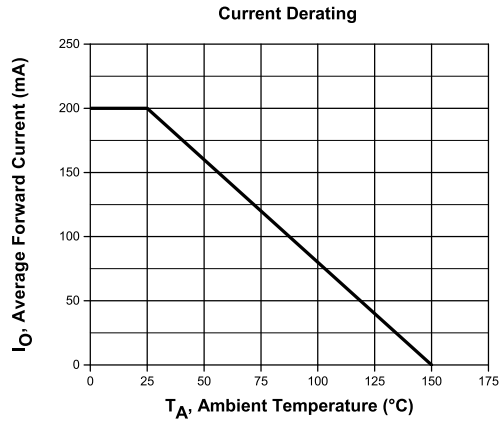
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TYPICAL ELECTRICAL CHARACTERISTICS



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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

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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