

CMXSTB200  
 CMXSTB300  
 CMXSTB400

**SURFACE MOUNT SILICON  
 FORWARD REFERENCE DIODE  
 (STABISTOR)**



[www.centrasemi.com](http://www.centrasemi.com)



**SOT-26 CASE**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMXSTB200 Series types are multi-chip silicon diodes mounted in a surface mount SOT-26 case and designed for applications requiring controlled forward voltage characteristics such as voltage regulation, sensing, and comparing. This series is a surface mount alternative to the 1N4156, 1N4157, and 1N5179 leaded devices, respectively. Special selections of DC parameters including  $V_F$  at various test conditions are available on special order.

**MARKING CODES: CMXSTB200: CST2  
 CMXSTB300: CST3  
 CMXSTB400: CST4**

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

Power Dissipation  
 Operating and Storage Junction Temperature

**SYMBOL**

$P_D$   
 $T_J, T_{stg}$

350  
 -65 to +150

**UNITS**

mW  
 $^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS PER DEVICE - TESTED BETWEEN PIN 1 AND PIN3: ( $T_A=25^\circ\text{C}$ )**

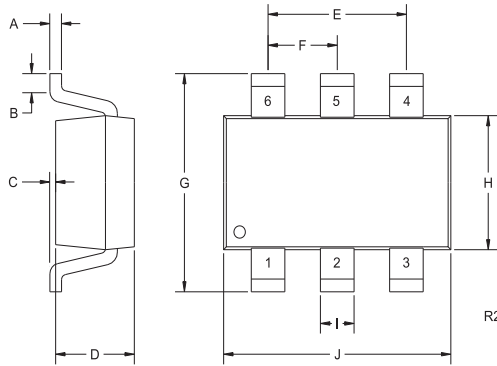
SYMBOL	TEST CONDITIONS	CMXSTB200		CMXSTB300		CMXSTB400		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
$I_R$	$V_R=20\text{V}$		10		10		10	$\mu\text{A}$
$V_F$	$I_F=1.0\text{mA}$	1.11	1.31	1.71	1.91	2.20	2.80	V
$V_F$	$I_F=10\text{mA}$	1.38	1.58	2.08	2.28	2.60	3.20	V
$V_F$	$I_F=100\text{mA}$	1.64	1.94	2.61	2.91	3.40	4.10	V

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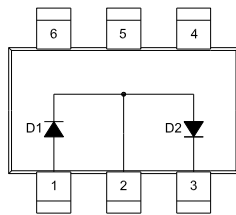
**SOT-26 CASE - MECHANICAL OUTLINE**



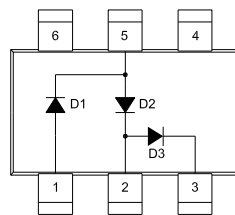
SYMBOL	DIMENSIONS		DIMENSIONS	
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016		0.41	
J	0.110	0.118	2.80	3.00

SOT-26 (REV: R2)

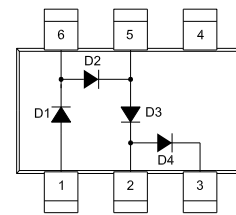
**PIN CONFIGURATIONS**



**CMXSTB200**  
**LEAD CODE:**  
1) Anode D1  
2) Cathode D1, Anode D2  
3) Cathode D2  
4) No Connection  
5) No Connection  
6) No Connection  
**MARKING CODE: CST2**

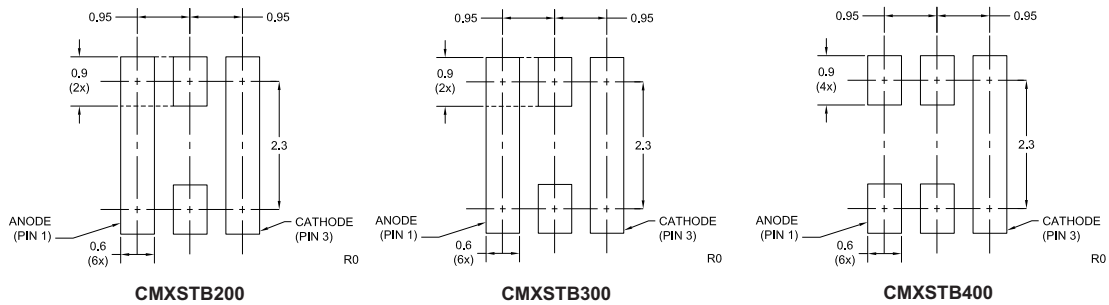


**CMXSTB300**  
**LEAD CODE:**  
1) Anode D1  
2) Cathode D2, Anode D3  
3) Cathode D3  
4) No Connection  
5) Anode D2, Cathode D1  
6) No Connection  
**MARKING CODE: CST3**



**CMXSTB400**  
**LEAD CODE:**  
1) Anode D1  
2) Cathode D3, Anode D4  
3) Cathode D4  
4) No Connection  
5) Anode D3, Cathode D2  
6) Cathode D1, Anode D2  
**MARKING CODE: CST4**

**SUGGESTED MOUNTING PADS (Dimensions in mm)**



R1 (12-February 2010)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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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
- Custom bar coding for shipments
- Custom product packing

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### 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

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### 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).

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### CONTACT US

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