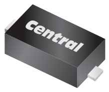
CMDD3003F

SURFACE MOUNT
LOW LEAKAGE SILICON
SWITCHING DIODE

SUPERmini™



SOD-323F CASE

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMDD3003F type is a silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a **SUPER**mini™ surface mount package, designed for switching applications requiring a extremely low leakage diode.

MARKING: 03F

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Continuous Reverse Voltage	V_R	180	V
Average Rectified Current	I_O	200	mA
Continuous Forward Current	I_F	600	mA
Peak Repetitive Forward Current	I_{FRM}	700	mA
Peak Forward Surge Current, tp=1.0μs	I_{FSM}	2.0	A
Peak Forward Surge Current, tp=1.0s	I_{FSM}	1.0	A
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	500	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**UNITS**
I_R	V_R=125V		1.0	nA
I_R	V_R=125V, T_A=150°C		3.0	μA
I_R	V_R=180V		10	nA
I_R	V_R=180V, T_A=150°C		5.0	μA
BV_R	I_R=5.0μA	200		V
V_F	I_F=1.0mA	0.62	0.72	V
V_F	I_F=10mA	0.72	0.83	V
V_F	I_F=50mA	0.80	0.89	V
V_F	I_F=100mA	0.83	0.93	V
V_F	I_F=200mA	0.87	1.10	V
V_F	I_F=300mA	0.90	1.15	V
C_T	V_R=0, f=1.0MHz		4.0	pF

R0 (29-Augusty 2025)

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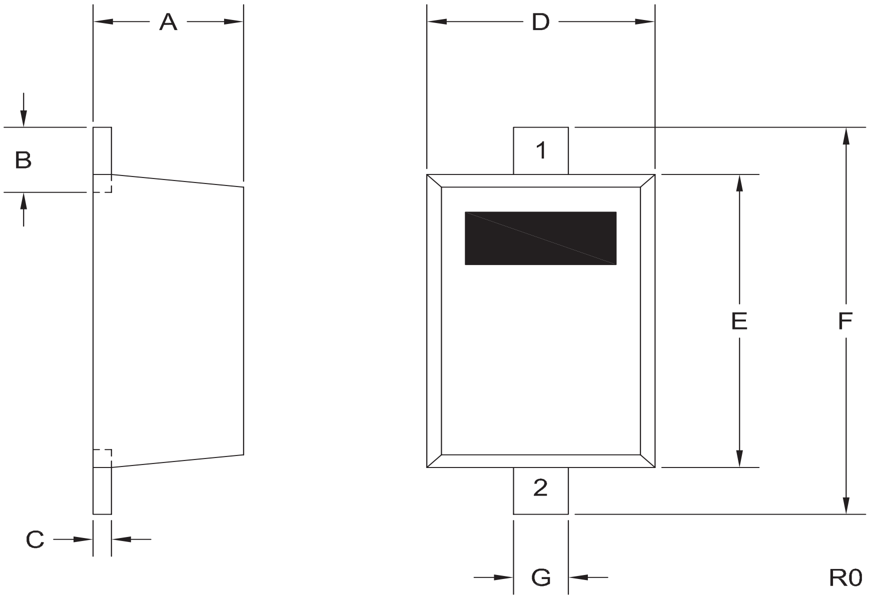
SOD-323F CASE - MECHANICAL OUTLINE



LEAD CODE:
1) CATHODE
2) ANODE

MARKING CODE: 03F

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.028	0.035	0.70	0.90
B	0.012	-	0.30	-
C	0.002	0.006	0.05	0.15
D	0.045	0.053	1.15	1.35
E	0.069	0.077	1.75	1.95
F	0.091	0.106	2.30	2.70
G	0.010	0.014	0.25	0.35
		SOD-323F (REV:R1)		

R0 (29-Augusty 2025)

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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