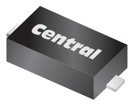
CMDSH-4EF

ENHANCED SPECIFICATION
SURFACE MOUNT SILICON SCHOTTKY DIODE



ENHANCED E SPECIFICATION

SOD-323F CASE

Central Semiconductor
www.centralsemi.com

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMDSH-4EF is an enhanced version of the CMDSH-3F silicon Schottky diode in an SOD-323F surface mount package.

ENHANCED SPECIFICATIONS:
- ◆ I_O from 100mA MAX to 200mA MAX
- ◆ BV_R from 30V MIN to 40V MIN
- ◆ V_F from 1.0V MAX to 0.8V MAX

MARKING CODE: SEF

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
◆ **Peak Repetitive Reverse Voltage**	V_{RRM}	**40**	**V**
◆ **Average Forward Current**	I_O	**200**	**mA**
Peak Repetitive Forward Current	I_{FRM}	350	mA
Peak Forward Surge Current, tp=10ms	I_{FSM}	750	mA
Power Dissipation	P_D	225	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	556	°C/W

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

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_R	V_R=25V		90	500	nA
I_R	V_R=25V, T_A=100°C		25	100	μA
◆ **BV_R**	**I_R=100μA**	**40**	**50**		**V**
V_F	I_F=2.0mA		0.29	0.33	V
◆ **V_F**	**I_F=15mA**		**0.37**	**0.42**	**V**
◆ **V_F**	**I_F=100mA**		**0.51**	**0.80**	**V**
◆◆ **V_F**	**I_F=200mA**		**0.65**	**1.0**	**V**
C_J	V_R=1.0V, f=1.0MHz		7.0		pF
t_{rr}	I_F=I_R=10mA, I_{rr}=1.0mA, R_L=100Ω			5.0	ns

◆ Enhanced specification.
◆◆ Additional Enhanced specification.

R1 (21-August 2025)

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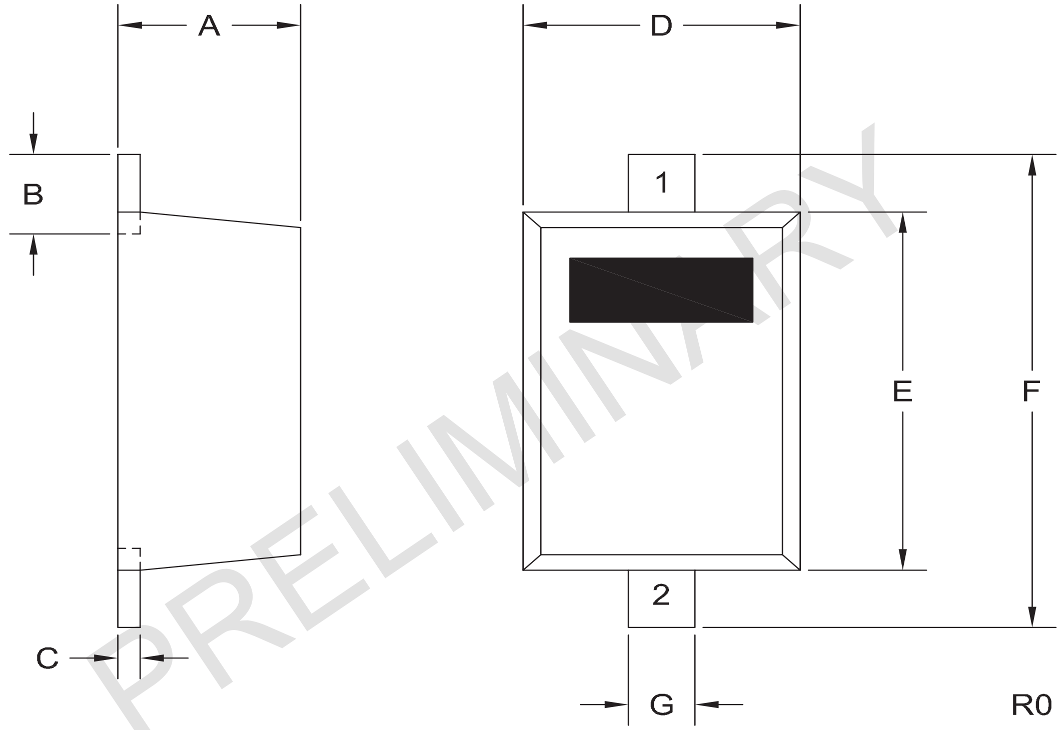
SOD-323F CASE - MECHANICAL OUTLINE



LEAD CODE:
1) Cathode
2) Anode

MARKING CODE: SEF

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)		

R1 (21-August 2025)

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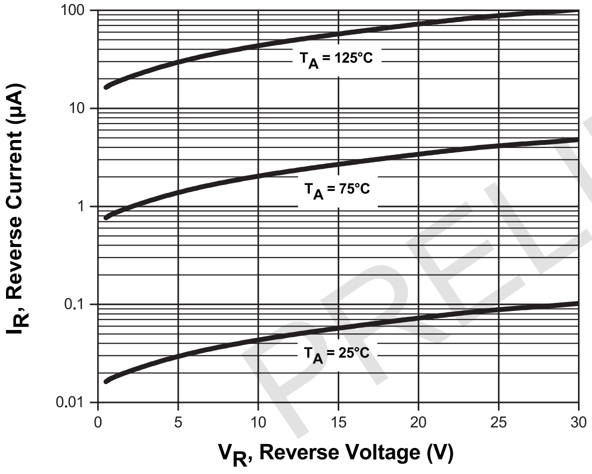
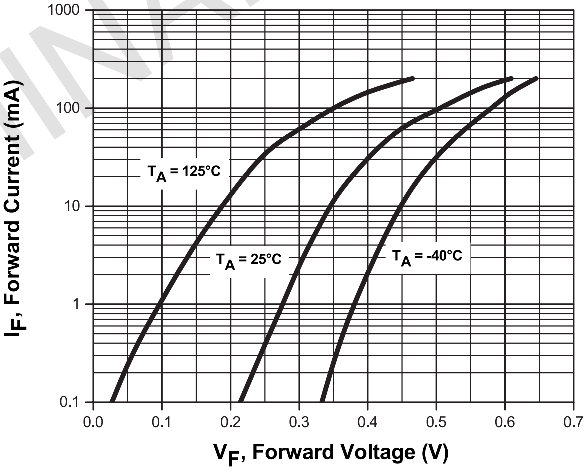
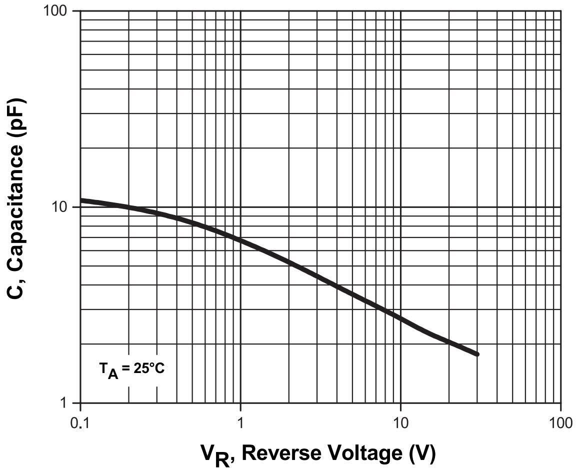
TYPICAL ELECTRICAL CHARACTERISTICS



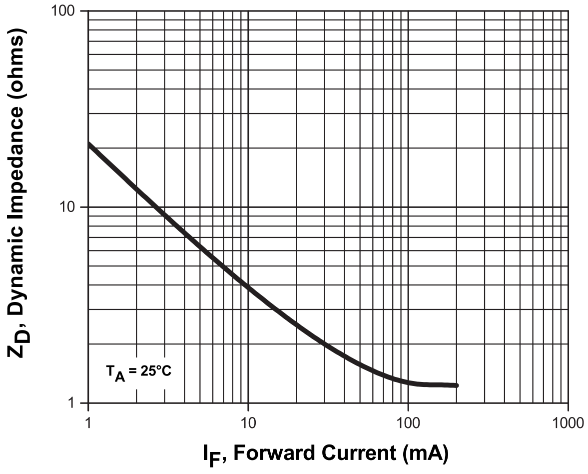
Leakage Current



Forward Voltage



Capacitance



Forward Dynamic Impedance

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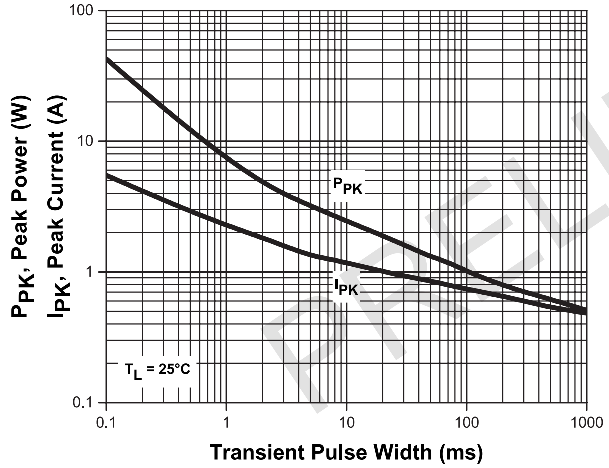
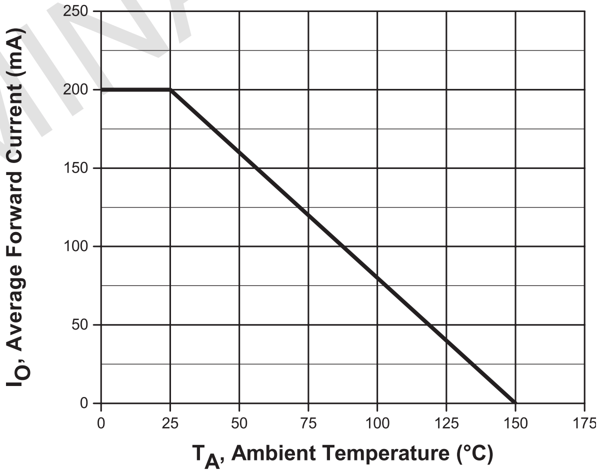
TYPICAL ELECTRICAL CHARACTERISTICS

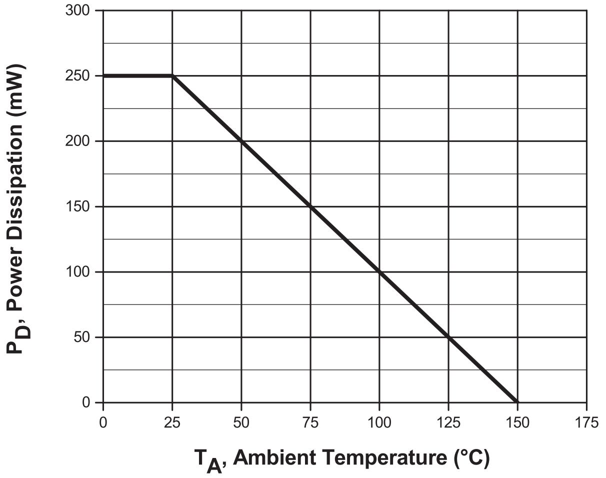
Transient Peak Power and Peak Current Capacity



Current Derating



Power Derating



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^{nd} 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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