

CMPESD24CA**SURFACE MOUNT SILICON
DUAL, BI-DIRECTIONAL
ESD PROTECTION DIODE**www.centrasemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPESD24CA is a low capacitance, dual, bi-directional ESD protection diode. This device is designed to protect two data lines against ESD damage.

MARKING CODE: 24CA**SOT-23 CASE****APPLICATIONS:**

- Data line protection
- User interface protection
- Charging/power port protection

FEATURES:

- Dual data line protection
- Low capacitance
- Low leakage current
- 20kV ESD protection

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)Peak Power Dissipation ($8 \times 20\mu\text{s}$)

ESD Voltage (IEC 61000-4-2, Air)

Operating Junction Temperature

Storage Temperature

SYMBOL P_{PK}

210

 V_{ESD}

20

 T_J

-55 to +125

 T_{stg}

-55 to +150

UNITS

W

kV

 $^\circ\text{C}$ $^\circ\text{C}$ **ELECTRICAL CHARACTERISTICS:** ($T_A=25^\circ\text{C}$)

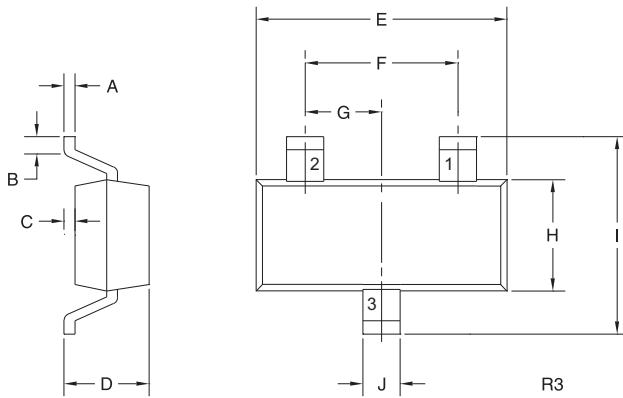
Maximum Reverse Stand-off Voltage V_{RWM}	Breakdown Voltage		Test Current I_T	Maximum Reverse Leakage Current $I_R @ V_{RWM}$	Maximum Clamping Voltage $V_C @ I_{PP}$	Peak Pulse Current I_{PP}	Typical Junction Capacitance @ 0V Bias C_J
	MIN V	MAX V					
24	25.4	30.3	5.0	50	70	3.0	9.0

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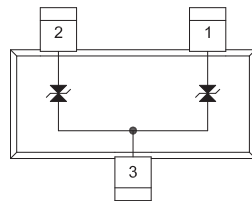
SOT-23 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

PIN CONFIGURATION

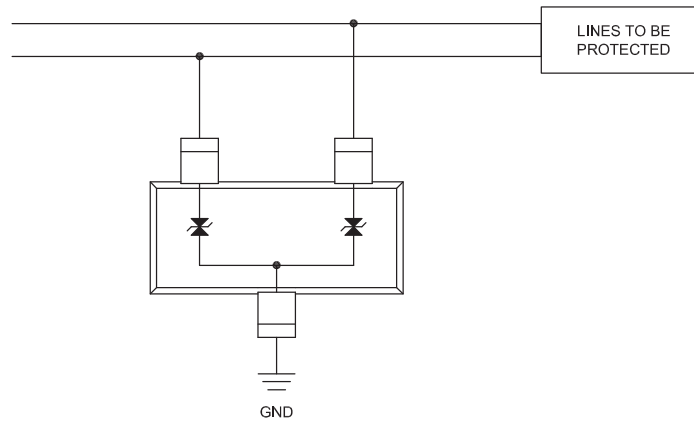


LEAD CODE:

- 1) Input 1
- 2) Input 2
- 3) Ground

MARKING CODE: 24CA

Application example:



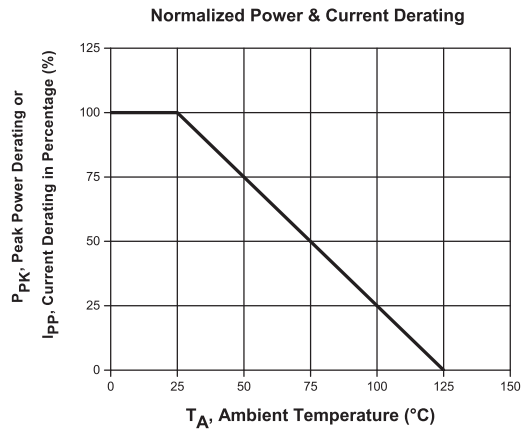
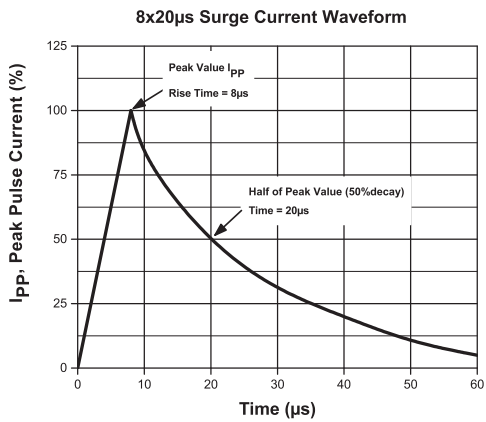
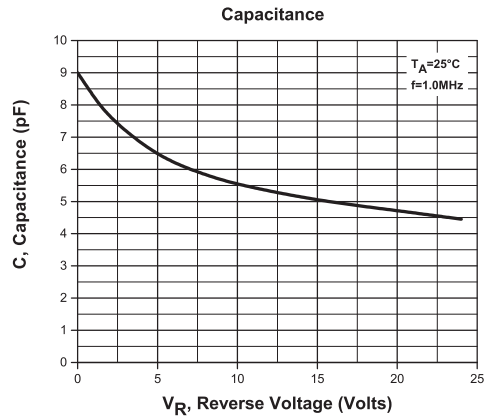
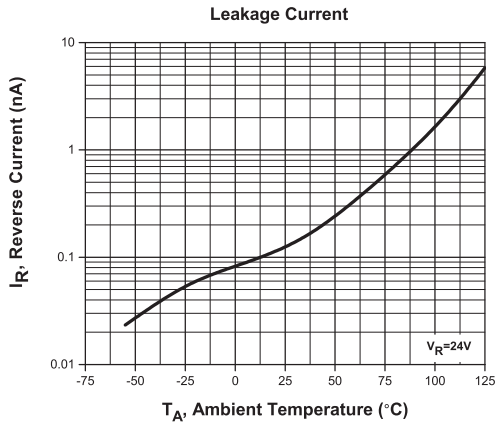
R2 (6-December 2013)

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TYPICAL ELECTRICAL CHARACTERISTICS



R2 (6-December 2013)