## Ordering Information

| Part Number | Ambient Temperature Range | Package | Environmental |
|---|---|---|---|
| AOZ8212ACI-05 | -40°C to +85°C | SOT-23 | Green Product |

AOS Green Products use reduced levels of Halogens, and are also RoHS compliant.
Please visit www.aosmd.com/media/AOSGreenPolicy.pdf for additional information.

## Absolute Maximum Ratings

*Exceeding the Absolute Maximum ratings may damage the device.*

| Parameter | Rating |
|---|---|
| Peak Pulse Current ($I_{PP}$), $t_P$ = 8/20µs | 6A |
| Peak Power Dissipation (TBD @ 25°C) | 110W |
| Storage Temperature ($T_S$) | -65°C to +150°C |
| IEC 61000-4-4 (EFT) | ±40A |
| ESD Rating per IEC61000-4-2, Contact(1) | ±15kV |
| ESD Rating per IEC61000-4-2, Air(1) | ±15kV |
| ESD Rating per Human Body Model(2) | ±30kV |

**Notes:**
1. IEC 61000-4-2 discharge with $C_{Discharge}$ = 150pF, $R_{Discharge}$ = 330Ω.
2. Human Body Discharge per MIL-STD-883, Method 3015 $C_{Discharge}$ = 100pF, $R_{Discharge}$ = 1.5kΩ.

## Maximum Operating Ratings

| Parameter | Rating |
|---|---|
| Junction Temperature ($T_J$) | -40°C to +125°C |

## Electrical Characteristics

$T_A$ = 25°C unless otherwise specified.

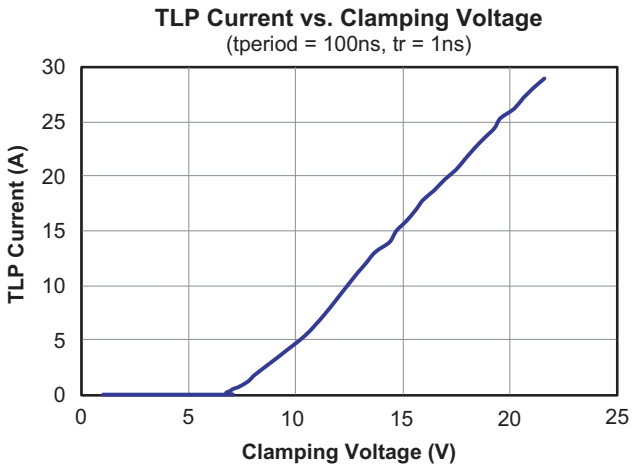
| Symbol | Parameter | | Symbol | Parameter |
|---|---|---|---|---|
| $I_{PP}$ | Maximum Reverse Peak Pulse Current | | $I_F$ | Forward Current |
| $V_{CL}$ | Clamping Voltage @ $I_{PP}$ | | $V_F$ | Forward Voltage |
| $V_{RWM}$ | Working Peak Reverse Voltage | | $P_{pk}$ | Peak Power Dissipation |
| $I_R$ | Maximum Reverse Leakage Current | | $C_J$ | Max. Capacitance @ $V_R$ = 0 and f = 1MHz |
| $V_{BR}$ | Breakdown Voltage | | | |

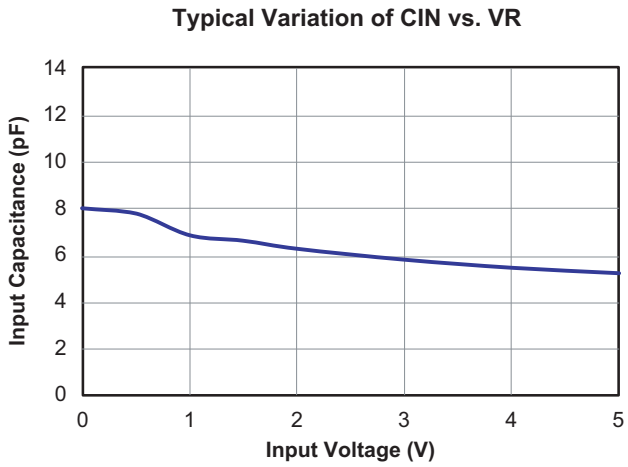
## Electrical Characteristics

$T_A$ = 25°C unless otherwise noted.

| Device | Device Marking | $V_{RWM}$ (V) Max. | $V_{BR}$ (V) Min @ 1mA | $I_R$ (µA) Max. | $V_{CL}$ Max. | | $C_J$ (pF) Typ. | $C_J$ (pF) Max. |
|---|---|---|---|---|---|---|---|---|
| | | | | | $I_{PP}$ = 1A | $I_{PP}$ = 10A | | |
| AOZ8212ACI-05 | BX | 5.0 | 5.5 | 0.1 | 10.0 | 16.0 | 11.0 | 14.0 |

## Typical Performance Characteristics



## LEGAL DISCLAIMER

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## LIFE SUPPORT POLICY

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As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.

2. A critical component in any component of a life support, device, or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.