

**LXZ1000**
**SURFACE MOUNT SOT-23**  
**Zero Bias (ZBD) Schottky Diodes**

RoHS Compliant



## DESCRIPTION

Mil spec quality Schottky barrier devices are available in economical SOT23 plastic packages. Priced for high volume commercial applications, these devices provide state-of-the-art electrical performance, ideal for use as detectors, mixers, in up/down converters or in sampling phase detectors. When ordering, specify configuration - see configuration table for internal wiring diagrams. Other configurations are available - some limitations apply. Consult factory for availability. The LXZ1000 series of diodes are the RoHS compliant versions of the LSZ1000 series. The LXZ series supersedes the LSZ version.

This LSX series of devices meets RoHS requirements per EU Directive 2002/95/EC.

## KEY FEATURES

- Standard SOT23 Package Outline
- Surface Mount design
- Wide Selecting of Values and Configurations
- Available on Tape & Reel for Automated Pick & Place Assembly
- Excellent Conversion Loss
- RoHS Compliant <sup>1</sup>

## APPLICATIONS

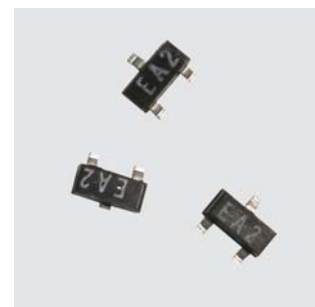
Microsemi offers a variety of Schottky Barrier diodes in the SOT23 package style. These products are well suited for mixer and detector applications, as well as for sampling, limiter and wave shaping circuits. Available on tape & reel, these products are ideal for high volume applications.

## APPLICATIONS/BENEFITS

- Detectors
- Limiters
- Sampling
- Wave Shaping

## ABSOLUTE MAXIMUM RATINGS AT 25° C (UNLESS OTHERWISE SPECIFIED)

Rating	Symbol	Value	Unit
Power Dissipation (De-rated linearly to 0 at T <sub>J</sub> (max))	P <sub>D</sub>	75	mW
Storage Temperature	T <sub>STG</sub>	-55 to +125	°C
Operating Temperature	T <sub>OP</sub>	-55 to +125	°C
Junction Temperature	T <sub>J</sub>	125	°C



**IMPORTANT:** For the most current data, consult our website: [www.MICROSEMI.com](http://www.MICROSEMI.com)  
 Specification subject to change. Consult factory for latest information.



These devices are ESD sensitive and must be handled using ESD precautions.

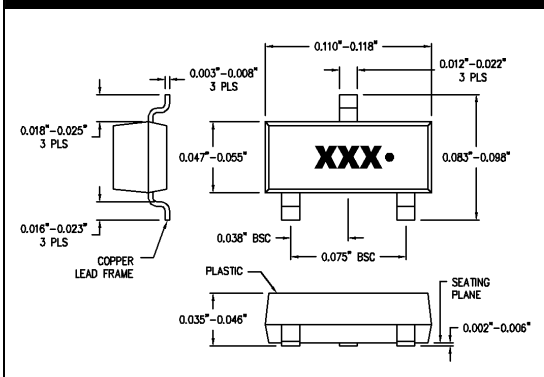
<sup>1</sup> These devices are supplied with a matte tin finish suitable for RoHS compliant assembly.


**Microsemi**<sup>®</sup>
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**ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)**

PN – Configuration		$V_B$ (V) @ $I_R = 100\mu A$ (Min)	$V_F$ (mV) @ $I_F = 0.1mA$ (Max)	$V_F$ (mV) @ $I_F = 1mA$ (Max)	$C_T$ (pF) <sup>1</sup> @ 0.5V (Typ)	$R_V$ (k $\Omega$ ) @ -30dbm (Typ)
LXZ1000	23-13 23-14	1.0	150	250	0.3	2 – 8

 Note 1: Capacitance is measured at  $f = 1$  MHz.

**PACKAGE STYLE 23**

**CONFIGURATIONS / INDUSTRY EQUIV.**

23-13	
	HSMS2850
23-14	
	HSMS2852