LSX101-LSX701

SURFACE MOUNT SOT-23
General Purpose Schottky Diodes

RoHS Compliant e3

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 LSX series of diodes are the RoHS compliant versions of the LSS series. The LSX series supersedes the LSS version.

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

KEY FEATURES

- Standard SOT-23 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 [1]

APPLICATIONS

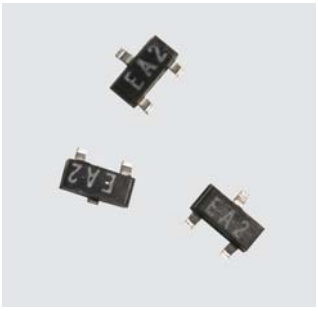
Microsemi offers a variety of Schottky Barrier diodes in the SOT-23 package style. These products are well suited for mixer and detector applications, as well as for sampling, limiter and wave shaping circuits. Available on tape & reel, these products are ideal for high volume applications.

APPLICATIONS/BENEFITS

- Mixers
- 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_J (max)	P_D	250	mW
Storage Temperature	T_{STG}	-55 to +125	°C
Operating Temperature	T_{OP}	-55 to +125	°C
Forward Current (1us Pulse)	I_F	1.0	A



IMPORTANT: For the most current data, consult our website: ***www.MICROSEMI.com***
Specifications subject to change. Consult factory for latest information.

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

[1] These devices are supplied with a matte tin finish suitable for RoHS compliant assembly.

Microsemi
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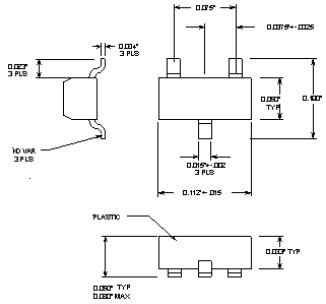
DEVICE ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)

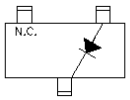
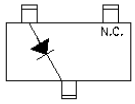
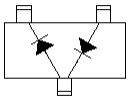
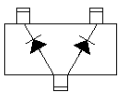
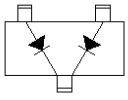
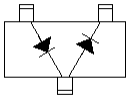
PN – Configuration		V_B @I_R=10µA (V) **(Min)**	V_B @I_R=100uA (V) **(Min)**	I_R@V_R (nA) **(Max)**	@V_R(V)	V_F(mV) @I_F = 1mA	C_T(pF)[1] @0V **(Max)**	R_D(Ω) @I_F=5mA **(Typ)**
LSX101	23-0 23-1 23-2 23-3 23-4 23-5		8.0	100	@1.0V	250 - 350	1.0	10
LSX201	23-0 23-2	3.0		400	@1.0V	250 - 350	0.30	14
LSX301	23-0 23-1 23-2 23-3 23-4	20		200	@15.0V	300 - 430	1.4	15
LSX701	23-0	70		200	@50.0V	300 - 430	2.0	32

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

PACKAGE STYLE 23



CONFIGURATIONS

23-0	23-1	23-2
		
23-3	**23-4**	**23-5**
		

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INDUSTRY CROSS REFERNECE					
PART NUMBER	CONFIGURATION		INDUSTRY EQUIVALENTS		
LSX701	23-0		HSMS2800	SMS1526-50	MA4CS101A
LSX301	23-0		HSMS2810	SMS1526-30	MA4CS103A
	23-1		HSMS2811		
	23-2		HSMS2812	SMS1527-30	MA4CS103B
	23-3		HSMS2813	SMS1528-30	MA4CS103D
	23-4		HSMS2814	SMS1529-30	MA4CS103C
LSX101	23-0		HSMS2820	SMS1526-10	MA4CS102A
	23-1		HSMS2821		
	23-2		HSMS2822	SMS1527-10	MA4CS102B
	23-3		HSMS2823	SMS1528-10	MA4CS102D
	23-4		HSMS2824	SMS1529-10	MA4CS102C
	23-5				
LSX201	23-0			SMS3989	MA4E1245KA
	23-2			SMS3988	MA4E1245KB

NOTES

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