



1SS361LP3

ULTRA-SMALL LEADLESS SURFACE MOUNT SWITCHING DIODE

Features

- Ultra-Small Leadless Surface Mount Package (0.6 x 0.3mm)
- Ultra-Low Profile Package (0.3mm)
- Fast Switching Speed
- Low Forward Voltage
- Fast Reverse Recovery
- Low Capacitance
- Lead Free By Design/RoHS Compliant (Note 1)
- "Green" Device (Note 2)

Mechanical Data

- Case: X3-DFN0603-2
- Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminal Connections: Cathode Bar
- Terminals: Finish Matte Tin Finish over Copper Leadframe
- (Lead Free Plating). Solderable per MIL-STD-202, Method 208
- Weight: 0.0002 grams (Approximate)



Top View



Bottom View

Ordering Information (Note 3)

Part Number	Case	Packaging	
1SS361LP3-7	X3-DFN0603-2	10,000/Tape & Reel	

Notes:

- 1. No purposefully added lead.
- 2. Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com.
- 3. For packaging details, go to our website at http://www.diodes.com.

Marking Information

S3

S3 = Product Type Marking Code Bar Denotes Cathode Side



Maximum Ratings @TA = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit	
Non-Repetitive Peak Reverse Voltage	V_{RM}	85	V	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	80	V	
RMS Reverse Voltage	V _{R(RMS)}	57	V	
Forward Continuous Current	I _{FM}	300	mA	
Average Rectified Output Current	lo	100	mA	
Non-Repetitive Peak Forward Surge Current @ t = 1.0µs	I _{FSM}	2.0	A	

Thermal Characteristics

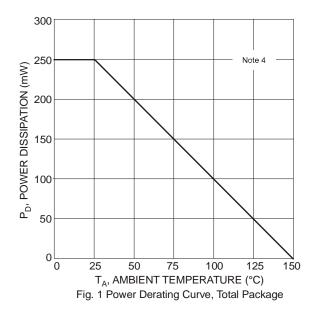
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 4)	PD	250	mW
Thermal Resistance Junction to Ambient Air (Note 4)	$R_{ heta JA}$	500	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

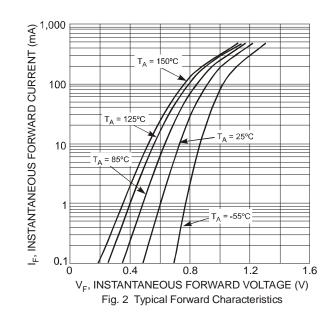
Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 5)	$V_{(BR)R}$	80			V	$I_R = 100 \mu A$
		_	0.61			$I_F = 1.0 \text{mA}$
Forward Voltage	V _F	_	0.75	_		$I_F = 10mA$
		_	0.95	1.23		I _F = 100mA
Leakage Current (Note 5)	1	_		0.5	μA	$V_R = 30V$
Leakage Current (Note 5)	IR	_		1.0	μA	$V_{R} = 80V$
Total Capacitance	C _T	_	0.37	3.0	pF	$V_R = 0$, $f = 1.0MHz$
Reverse Recovery Time	t _{rr}		1.7	4.0	ns	$I_F = I_R = 10 \text{mA},$
Reverse Recovery Time						$I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1 \text{ x } I_R, R_L = 100 \Omega$

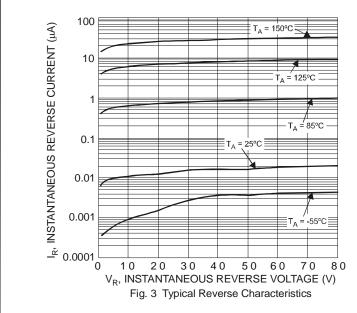
Notes:

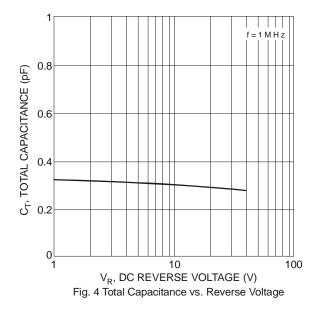
- 4. Part mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com.
- 5. Short duration pulse test used to minimize self-heating effect.



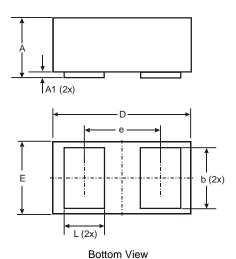






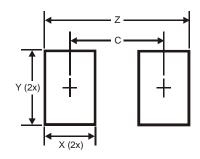


Package Outline Dimensions



X3-DFN0603-2					
Dim	Min	Max	Тур		
Α	0.27	0.35	0.30		
A1	0.00	0.03	0.02		
b	0.19	0.29	0.24		
D	0.595	0.645	0.62		
Е	0.295	0.345	0.32		
е	-	-	0.355		
Ĺ	0.14	0.24	0.19		
All Dimensions in mm					

Suggested Pad Layout



Dimensions	Value (in mm)
С	0.355
Х	0.230
Y	0.300
Z	0.610



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