



# SD103ASDM

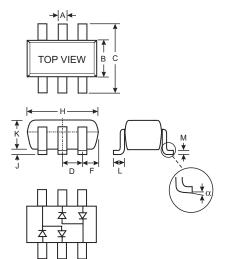
## SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAY

### **Features**

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Reverse Capacitance
- Lead Free/RoHS Compliant (Note 3)
- "Green" Device, Note 4 and 5

### **Mechanical Data**

- Case: SOT-26
- Case Material: Molded Plastic, "Green" Molding Compound, Note 5. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Polarity: See Diagram
- Leads: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Copper leadframe).
- Marking: KSU (See Page 3)
- Weight: 0.016 grams (approximate)



SOT-26								
Dim	Min	Max	Тур					
Α	0.35	0.50	0.38					
В	1.50	1.70	1.60					
С	2.70	3.00	2.80					
D		_	0.95					
F		_	0.55					
Н	2.90	3.10	3.00					
J	0.013	0.10	0.05					
К	1.00	1.30	1.10					
L	0.35	0.55	0.40					
М	0.10	0.20	0.15					
α	0°	8°	_					
All Dimensions in mm								

## **Maximum Ratings** @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	40	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	V
Forward Continuous Current (Note 1)	IFM	350	mA
Non-Repetitive Peak Forward Surge Current @ $t \le 1.0s$	I <sub>FSM</sub>	1.5	A
Power Dissipation (Note 1)	Pd	225	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>0JA</sub>	444	°C/W
Operating and Storage Temperature Range	Tj, T <sub>STG</sub>	-65 to +125	°C

TOP VIEW

### Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	40	_	_	V	I <sub>R</sub> = 100μA
Forward Voltage Drop	V <sub>F</sub>	_	_	0.37 0.50 0.60	V	$I_F = 20mA$ $I_F = 100mA$ $I_F = 200mA$
Reverse Current (Note 2)	IR		_	5.0	μ <b>A</b>	V <sub>R</sub> = 30V
Total Capacitance	CT		50		pF	V <sub>R</sub> = 0V, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>		10		ns	$I_{F} = I_{R} = 200 \text{mA},$ $I_{rr} = 0.1 \text{ x } I_{R}, R_{L} = 100 \Omega$

Notes: 1. Device mounted on FR-5 PCB 1.0 x 0.75 x 0.062 inch pad layout as shown on Diodes Inc. suggested pad layout AP02001, which

can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf.

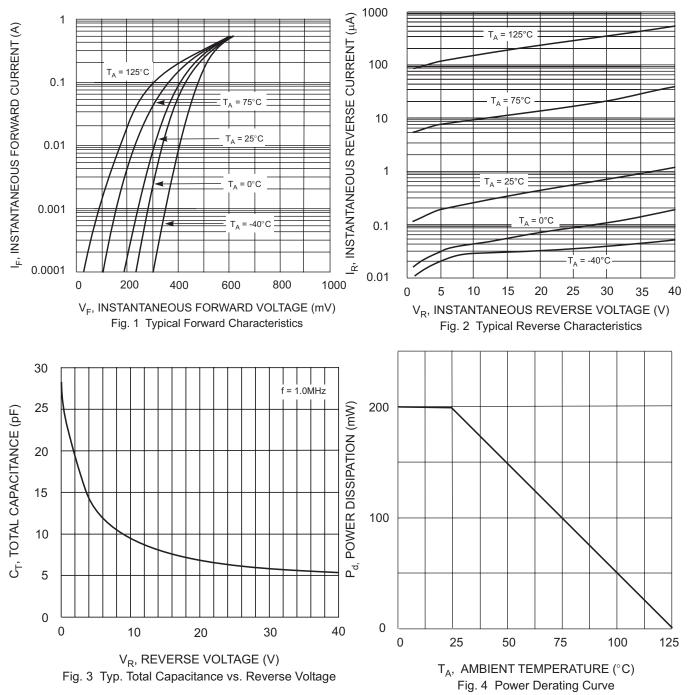
2. Short duration test pulse used to minimize self-heating effect.

3. No purposefully added lead.

4. Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com/products/lead\_free/index.php.

5. Product manufactured with Date Code 0609 (week 9, 2006) and newer are built with Green Molding Compound. Product manufactured prior to Date Code 0609 are built with Non-Green Molding Compound and may contain Halogens or Sb2O3 Fire Retardants







#### Ordering Information (Note 5 & 6)

Device	Packaging	Shipping		
SD103ASDM-7-F	SOT-26	3000/Tape & Reel		

Notes: 5. Product manufactured with Date Code 0609 (week 9, 2006) and newer are built with Green Molding Compound. Product manufactured prior to Date Code 0609 are built with Non-Green Molding Compound and may contain Halogens or Sb2O3 Fire Retardants

6. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

#### **Marking Information**

Date Code Key			[ KSU MA ] [	Т мү кгп	YM Y =	= Date 0 Year ex	uct Type N Code Mark T = 2006 x: 9 = Sej	king	code			
Year		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code		N	Р	R	S	Т	U	V	W	Х	Y	Z
Month	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	0	N	D

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