



<u>SD103ATW</u>

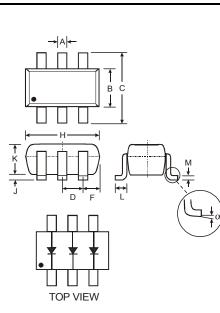
SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAY

Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current
- Three Fully Isolated Schottky Diodes
- Lead Free/RoHS Compliant (Note 3)
- "Green" Device (Note 5 and 6)

Mechanical Data

- Case: SOT-363
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Polarity: See Diagram
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Marking Information: See Page 3
- Ordering Information: See Page 3
- Weight: 0.006 grams (approximate)



SOT-363								
Dim	Min	Max						
Α	0.10	0.30						
В	1.15	1.35						
С	2.00	2.20						
D	0.65 Nominal							
F	0.30	0.40						
н	1.80	2.20						
J	_	0.10						
К	0.90	1.00						
L	0.25	0.40						
М	0.10	0.25						
α	0°	8°						
All Dimensions in mm								

Maximum Ratings @T_A = 25°C unless otherwise specified

Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	40	v
RMS Reverse Voltage		V _{R(RMS)}	28	V
Forward Continuous Current	(Note 1)	I _{FM}	350	mA
Average Rectified Current	(Note 1)	lo	175	mA
Non-Repetitive Peak Forward Surge Current ((Note 1) @ t ≤ 10ms	I _{FSM}	1.0	А
Power Dissipation	(Note 4)	Pd	200	mW
Thermal Resistance, Junction to Ambient Air	(Note 4)	$R_{ ext{ heta}JA}$	500	°C/W
Operating and Storage Temperature Range		T _i , T _{STG}	-55 to +125	°C

Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic			Min	Тур	Max	Unit	Test Condition		
Reverse Breakdown Voltage	(Note 2)	V _{(BR)R}	40			V	I _{RS} = 100μA (pulsed)		
Forward Voltage Drop		V _F	_	0.27	_	V	I _F = 1mA		
			_	0.32		V	$I_F = 5mA$		
				0.36	0.37	V	I _F = 20mA		
				0.44	0.50	V	I _F = 100mA		
Reverse Current	(Note 2)	I _R		0.2	2.0	μA	V _R = 10V		
	(Note 2)		_	0.4	5.0	μA	V _R = 30V		
Total Capacitance		CT		50		pF	V _R = 0V, f = 1.0MHz		
Reverse Recovery Time		+		10		ns	I _F = I _R = 200mA,		
		t _{rr}	_	10		113	$I_{rr} = 0.1 \text{ x } I_R, R_L = 100\Omega$		

Notes: 1. This is the maximum rating of single Diode (D₁ or D₂ or D₃). In the case of using two or three diodes, the maximum ratings per diode are 75% of the ratings for single diode operation.

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

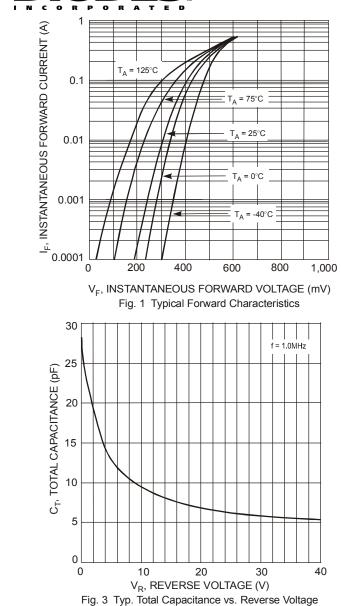
3. No purposefully added lead.

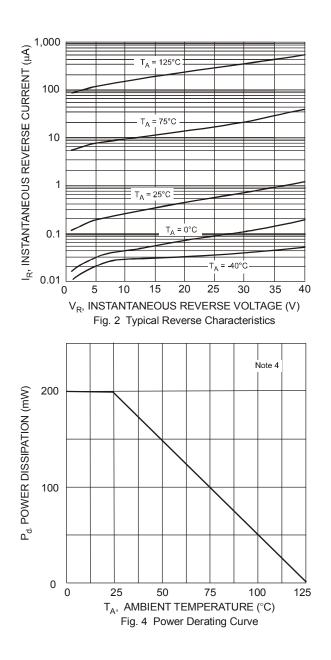
4. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf.

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

6. Product manufactured with Date Code UO (week 40, 2007) and newer are built with Green Molding Compound. Product manufactured prior to Date Code UO are built with Non-Green Molding Compound and may contain Halogens or Sb2O3 Fire Retardants.







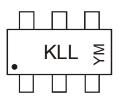


Ordering Information (Note 7)

Device	Packaging	Shipping		
SD103ATW-7-F	SOT-363	3000/Tape & Reel		

Notes: 7. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



KLL = Product Type Marking Code YM = Date Code Marking Y = Year ex: N = 2002 M = Month ex: 9 = September

Date Code Key												
Year	2002	2003	2004	200	5 20	06 2	007	2008	2009	2010	2011	2012
Code	N	Р	R	S	Т	r i	U	V	W	Х	Y	Z
Month	Jan	Feb	Mar	Apr	Мау	Jun	Ju	Aug	g Se	p Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	0	Ν	D

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