

# NSVR351SDSA3

## Advance Information Schottky Barrier Diode for Mixer and Detector

This schottky barrier diode is designed to realize compact and efficient designs. Two schottky barrier diodes are incorporated in one SC-59 package. The use of dual schottky barrier diodes can reduce both system cost and board space. This schottky barrier diode is AEC-Q101 qualified and PPAP capable for automotive applications.

### Features

- Series connection of 2 elements in a small-sized package
- Small Interterminal Capacitance ( $C = 0.69 \text{ pF typ}$ )
- Small Forward Voltage ( $V_F = 0.23 \text{ V max}$ )
- Pb-Free, Halogen Free and RoHS compliance
- AEC-Q101 qualified and PPAP capable

### Typical Applications

- Level Detector for Radio

### SPECIFICATIONS

**ABSOLUTE MAXIMUM RATINGS** at  $T_a = 25^\circ\text{C}$  (Note 1)

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_{RM}$	5	V
Forward Current	$I_F$	30	mA
Operating Junction and Storage Temperature	$T_j, T_{stg}$	-55 to +125	$^\circ\text{C}$

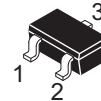
Note 1 : Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.



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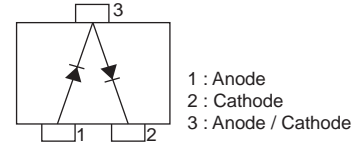
www.onsemi.com

**5 V, 30 mA**  
 **$C = 0.69 \text{ pF typ}$**   
**Schottky Barrier Diode**

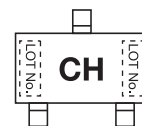


**SC-59 / CP3**

### ELECTRICAL CONNECTION



### MARKING



### ORDERING INFORMATION

See detailed ordering and shipping information on page 4 of this data sheet

This document contains information on a new product. Specifications and information herein are subject to change without notice.

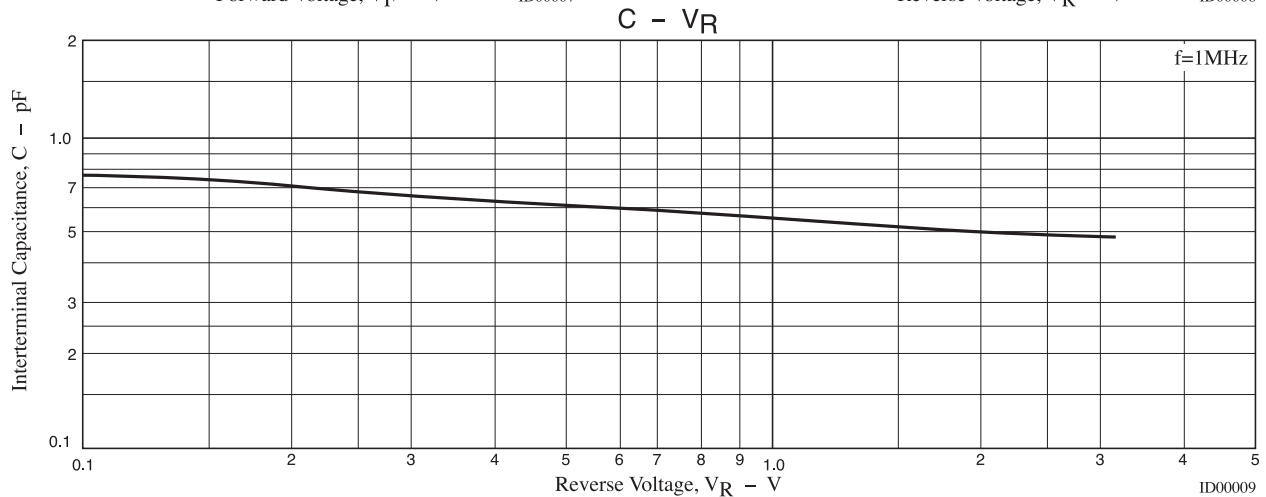
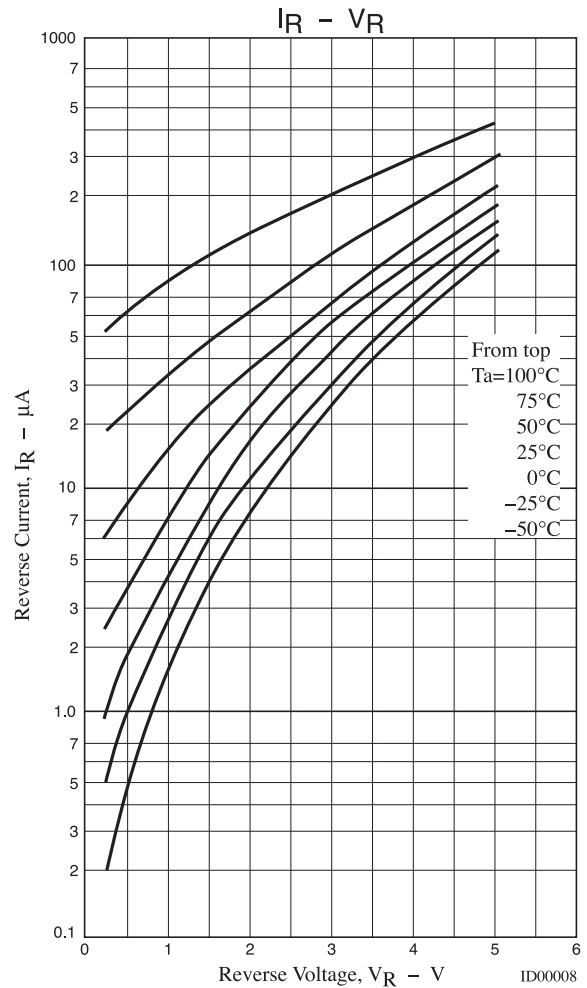
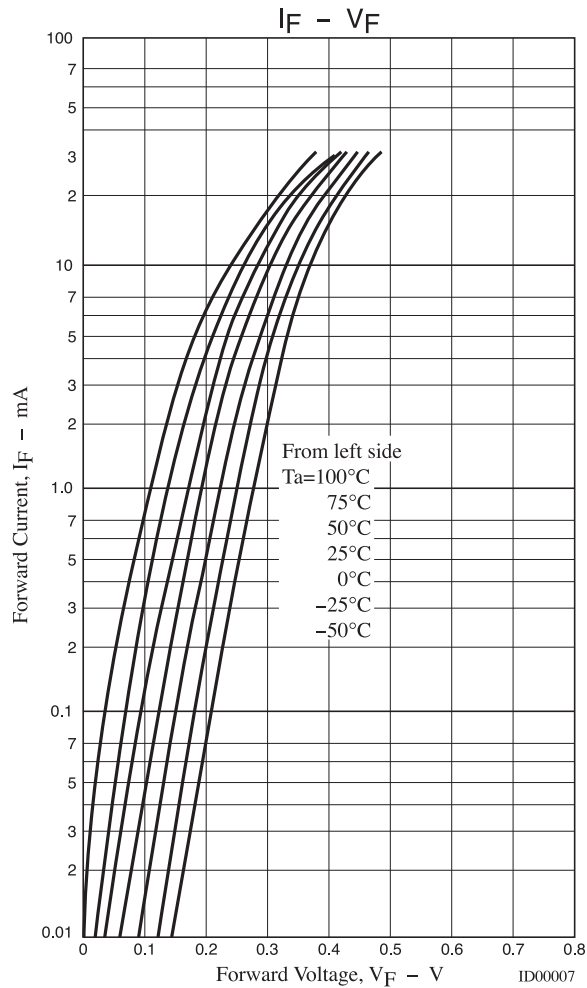
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## ELECTRICAL CHARACTERISTICS at Ta = 25°C (Note 2)

Parameter	Symbol	Conditions	Value			Unit
			min	typ	max	
Forward Voltage	$V_F$	$I_F = 1 \text{ mA}$			0.23	V
Forward Current	$I_F$	$V_F = 0.5 \text{ V}$	30			mA
Reverse Current	$I_R$	$V_R = 0.5 \text{ V}$			25	$\mu\text{A}$
Interterminal Capacitance	C	$V_R = 0.2 \text{ V}, f = 1 \text{ MHz}$		0.69	0.9	pF

Note 2 : Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

Note 3 : The specifications shown above are for each individual diode.

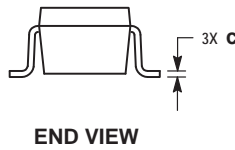
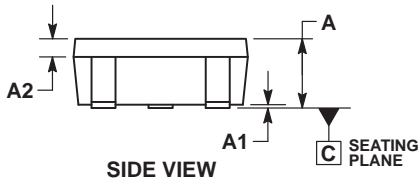
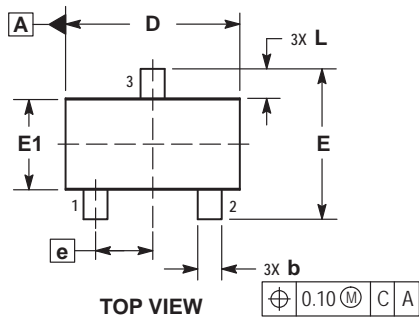


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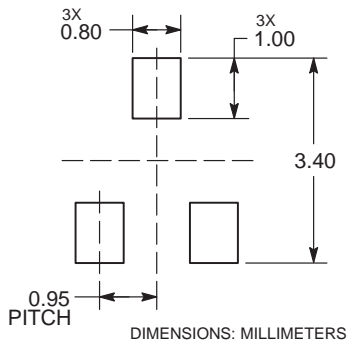
## PACKAGE DIMENSIONS

unit : mm

SC-59 / CP3  
CASE 318BJ  
ISSUE O



### RECOMMENDED SOLDERING FOOTPRINT\*



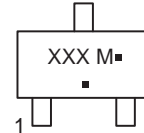
- 1 : Anode
- 2 : Cathode
- 3 : Anode / Cathode

### NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. DIMENSIONS D AND E1 DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS. MOLD FLASH, PROTRUSIONS, OR GATE BURRS SHALL NOT EXCEED 0.20 PER SIDE.
4. DIMENSIONS D AND E1 ARE MEASURED AT THE OUTERMOST EXTREME OF THE PLASTIC BODY.
5. DIMENSIONS b AND c APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.10 AND 0.20 FROM THE TIP.

MILLIMETERS		
DIM	MIN	MAX
A	0.95	1.35
A1	0.00	0.10
A2	0.20	0.40
b	0.35	0.50
c	0.10	0.20
D	2.75	3.05
E	2.30	2.70
E1	1.35	1.65
e	0.95 BSC	
L	0.35	0.75

### GENERIC MARKING DIAGRAM



- XXX = Specific Device Code
- M = Date Code
- = Pb-Free Package

(Note: Microdot may be in either location)

\*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "■", may or may not be present.

\*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

# NSVR351SDSA3

## ORDERING INFORMATION

Device	Marking	Package	Shipping
NSVR351SDSA3T1G	CH	SC-59 / CP3 (Pb-Free / Halogen Free)	3,000 / Tape & Reel

† For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D. [http://www.onsemi.com/pub\\_link/Collateral/BRD8011-D.PDF](http://www.onsemi.com/pub_link/Collateral/BRD8011-D.PDF)

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