NSVP264SDSF3

Advance Information

PIN Diode

Dual series PIN Diode for VHF, UHF and AGC

ON Semiconductor®

www.onsemi.com

This PIN diode is designed to realize compact and efficient designs. Two PIN diodes are incorporated in one SC-70 package. The use of dual PIN diodes can reduce both system cost and board space. This PIN diode is AEC-Q101 qualified and PPAP capable for automotive applications.

50 V, 50 mA
r_S = 2.5 Ω typ
PIN Diode

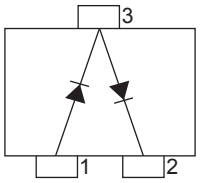
Features

- Series connection of 2 elements in a small-size package
- Small Interterminal Capacitance (C = 0.23 pF typ)
- Small Forward Series Resistance (r_S = 2.5 Ω typ)
- Pb-Free, Halogen Free and RoHS Compliance
- MCP3 package is pin-compatible with SC-70
- AEC-Q101 qualified and PPAP capable

Typical Applications

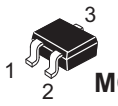
- Auto Gain Control for Radio

ELECTRICAL CONNECTION

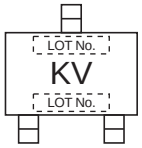


1 : Anode
2 : Cathode
3 : Cathode / Anode

MARKING



MCP3



ORDERING INFORMATION

See detailed ordering and shipping information on page 5 of this data sheet

SPECIFICATIONS

ABSOLUTE MAXIMUM RATINGS at Ta = 25°C (Note 1)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	50	V
Forward Current	I_F	50	mA
Allowable Power Dissipation	P	100	mW
Operating Junction and Storage Temperature	T_J, T_{stg}	−55 to +125	°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.

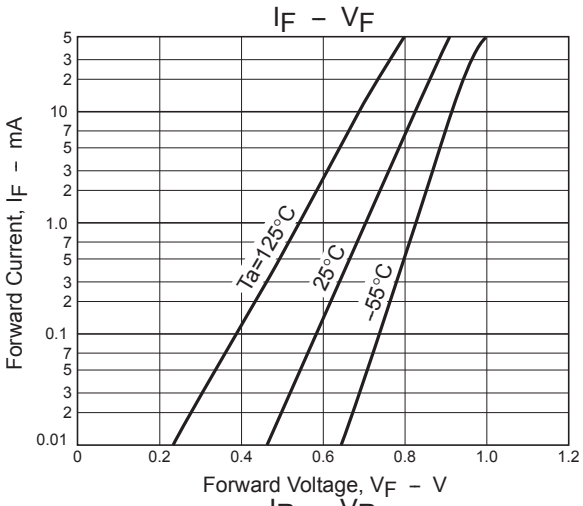
This document contains information on a new product. Specifications and information herein are subject to change without notice.

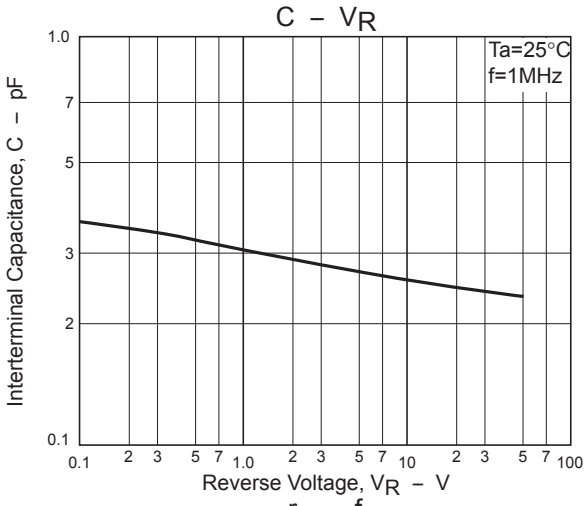
ELECTRICAL CHARACTERISTICS at Ta = 25°C (Note 2)

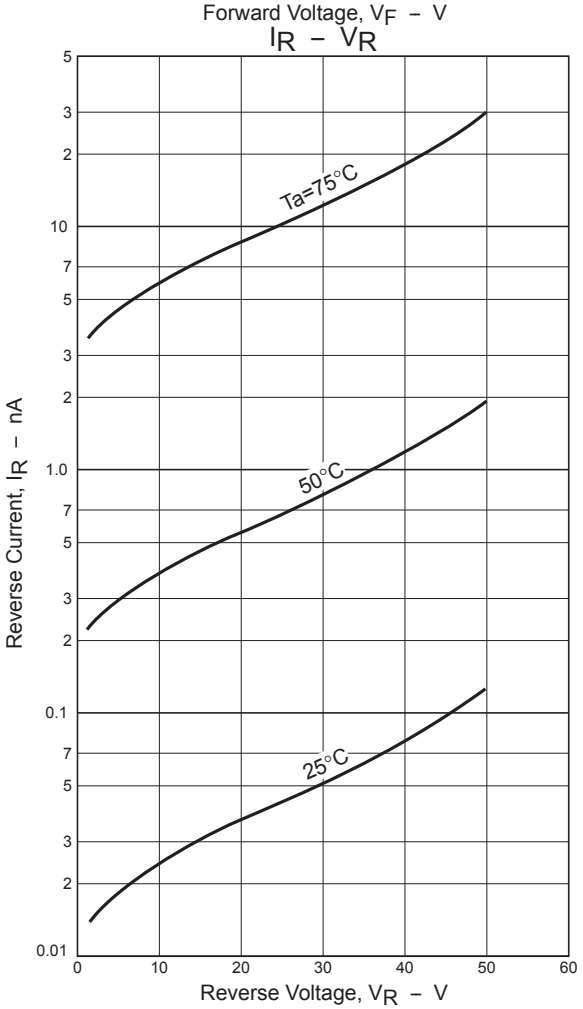
Parameter	Symbol	Conditions	Value			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R = 10 μA	50			V
Reverse Current	I_R	V_R = 50 V			0.1	μA
Forward Voltage	V_F	I_F = 50 mA		0.91	0.95	V
Interterminal Capacitance	C	V_R = 50 V, f = 1 MHz		0.23	0.4	pF
Series Resistance	r_s	I_F = 5 mA, f = 100 MHz		4.0	8.0	Ω
		I_F = 10 mA, f = 100 MHz		2.5	4.5	Ω

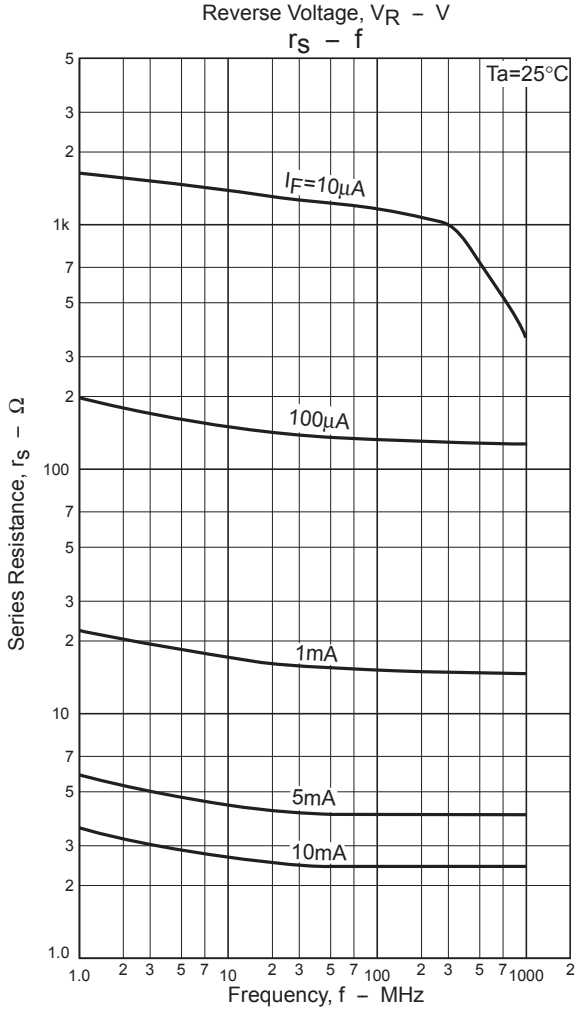
Note 2 : Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

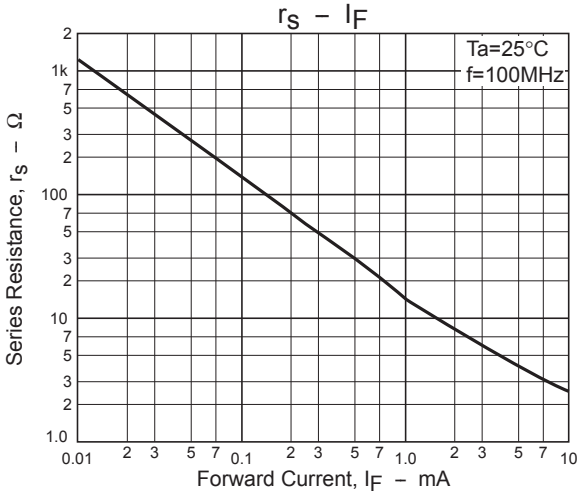
Note 3 : The specifications shown above are for each individual diode.


I_F – V_F
Forward Current, I_F – mA
Forward Voltage, V_F – V
Ta=125°C
25°C
–55°C


C – V_R
Interterminal Capacitance, C – pF
Reverse Voltage, V_R – V
Ta=25°C
f=1MHz

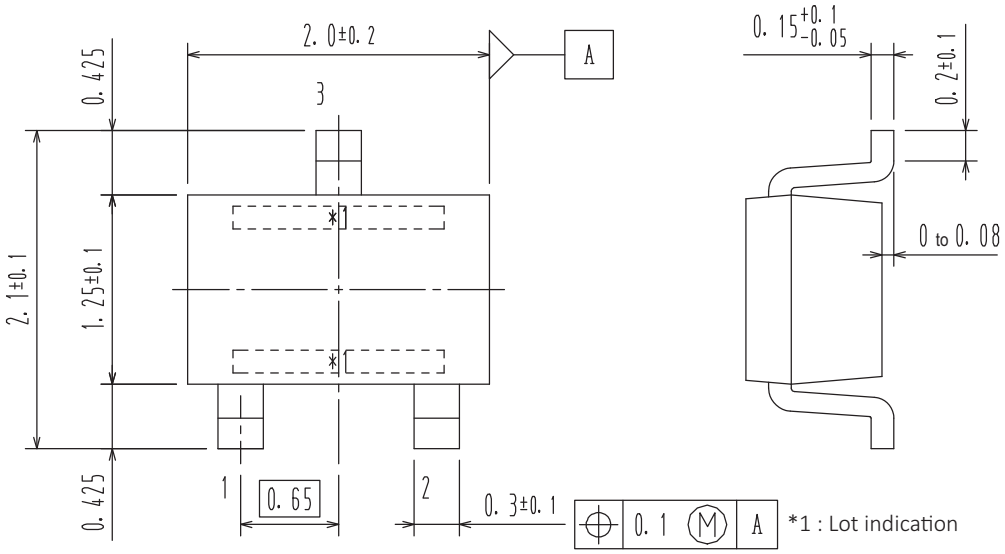

I_R – V_R
Reverse Current, I_R – nA
Reverse Voltage, V_R – V
Ta=75°C
50°C
25°C

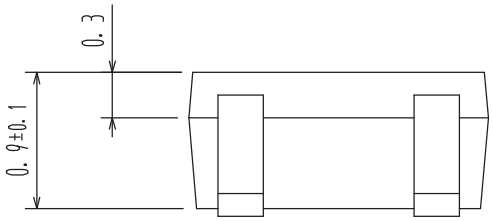

r_S – f
Series Resistance, r_S – Ω
Frequency, f – MHz
Ta=25°C
I_F=10μA
100μA
1mA
5mA
10mA


r_S – I_F
Series Resistance, r_S – Ω
Forward Current, I_F – mA
Ta=25°C
f=100MHz

PACKAGE DIMENSIONS
unit : mm

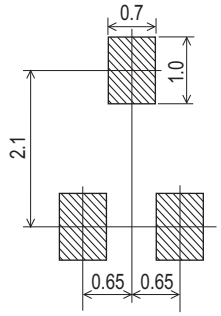
SC-70 / MCP3
CASE 419AJ
ISSUE O





1: Anode
2: Cathode
3: Cathode / Anode

RECOMMENDED SOLDERING FOOTPRINT



ORDERING INFORMATION

Device	Marking	Package	Shipping
NSVP264SDSF3T1G	KV	SC-70 / MCP3 (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