

**DESCRIPTION**

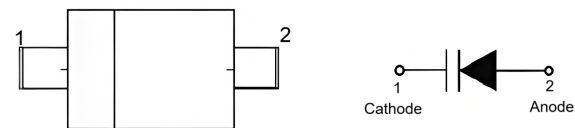
The 1SV214 is available in the SOD-323 package.

**FEATURE**

- High Capacitance Ratio:  $C_{2V}/C_{25V}=6.5(\text{Typ.})$
- Low Series Resistance:  $R_s=0.4\Omega(\text{Typ.})$
- Excellent C-V Characteristics and Small Tracking Error.
- Useful for small-size Tuner.

**ORDERING INFORMATION**

Package Type	Part Number
SOD-323	1SV214
SPQ	3,000pcs/Reel
AiT provides all RoHS Compliant Products	

**PIN DESCRIPTION**

PIN #	DESCRIPTION
1	Cathode
2	Anode

**ABSOLUTE MAXIMUM RATINGS**

$T_A = 25^\circ\text{C}$ , unless otherwise specified.

$V_R$ , Reverse Voltage	30 V
$V_{RM}$ , Peak Reverse Voltage	35 ( $R_L = 10K \Omega$ ) V
$T_{aj}$ , Junction Temperature	125 °C
$T_{stg}$ , Storage Temperature Range	-55 ~ +125 °C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

**ELECTRICAL CHARACTERISTICS**

$T_A=25^\circ\text{C}$  unless otherwise specified.

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	$V_R$	$I_R = 1 \mu\text{A}$	30	-	-	V
Reverse Current	$I_R$	$V_R = 28 \text{ V}$	-	-	10	nA
Capacitance	$C_{2V}$	$f = 1 \text{ MHz}; V_R = 2 \text{ V}$	14.16	-	16.25	pF
	$C_{25V}$	$f = 1 \text{ MHz}; V_R = 25 \text{ V}$	2.11	-	2.43	
Capacitance Ratio	$C_{2V}/C_{25V}$	-	5.9	6.5	7.15	-
Series Resistance	$r_s$	$V_R = 5 \text{ V}; f = 470 \text{ MHz}$	-	1.4	0.55	$\Omega$

Note: Available in matched group for capacitance to 2.5 %

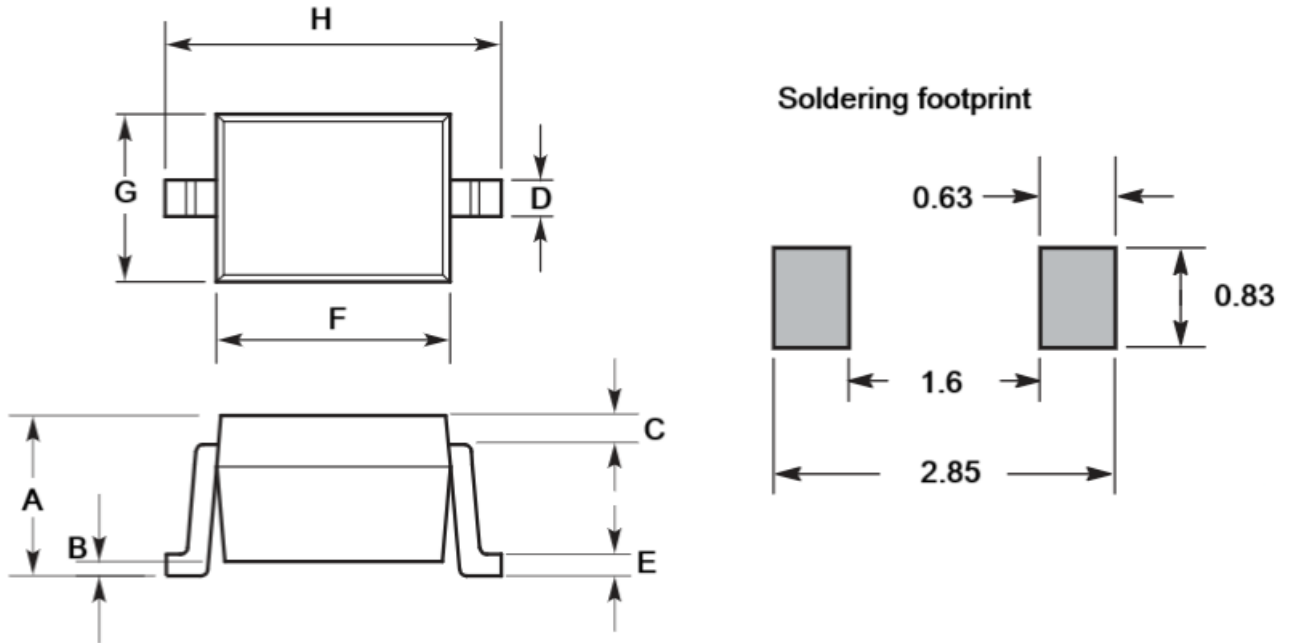
$$\frac{C(\text{Max.})-C(\text{Min.})}{C(\text{Min.})} \leq 0.025$$

( $V_R=2\sim 25\text{V}$ )



## PACKAGE INFORMATION

Dimension in SOD-323 (Unit: mm)



Symbol	Millimeter	
	Min.	Max.
A	0.910	1.160
B	0.000	0.100
C	-	-
D	0.330	0.400
E	0.127	0.200
F	1.520	1.770
G	1.110	1.370
H	2.460	2.710



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