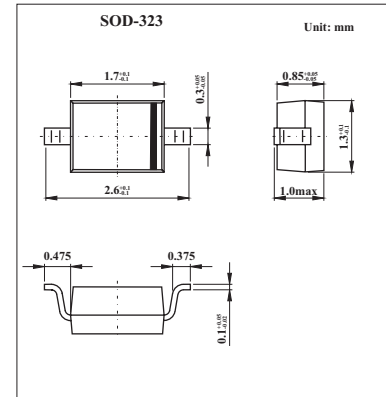


Silicon Epitaxial Planar Diode

1SV214

■ Features

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

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	30	V
Peak Reverse Voltage	V_{RM}	35 ($R_L = 10K\ \Omega$)	V
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +125	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	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	$V_R = 5\ \text{V}, f = 470\ \text{MHz}$		0.4	0.55	Ω

Note :

Available in matched group for capacitance to 2.5%.

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

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

■ Marking

Marking	T1
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