

# KDS114WT-AH

## Silicon Epitaxial Planar Band Switch Diode

### Features

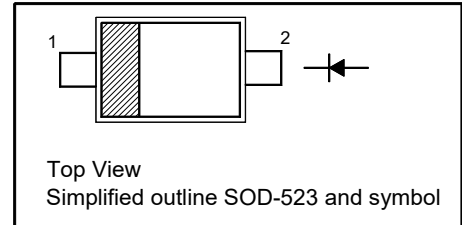
- AEC-Q101 Qualified
- Small package
- Small total capacitance
- Low series resistance
- Low leakage current
- Halogen and Antimony Free(HAF), RoHS compliant

### Application

- For VHF tuner band switch applications

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

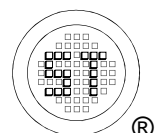


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	35	V
Forward Current	$I_F$	100	mA
Junction Temperature	$T_J$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 125	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 2\text{ mA}$	$V_F$	-	0.85	V
Reverse Current at $V_R = 15\text{ V}$	$I_R$	-	100	nA
Reverse Voltage at $I_R = 10\text{ }\mu\text{A}$	$V_R$	35	-	V
Total Capacitance at $V_R = 6\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	-	1.2	pF
Series Resistance at $I_F = 2\text{ mA}$ , $f = 100\text{ MHz}$	$r_s$	-	0.9	$\Omega$



## Electrical Characteristics Curves

Fig 1.  $r_s$  vs.  $I_F$  Curve

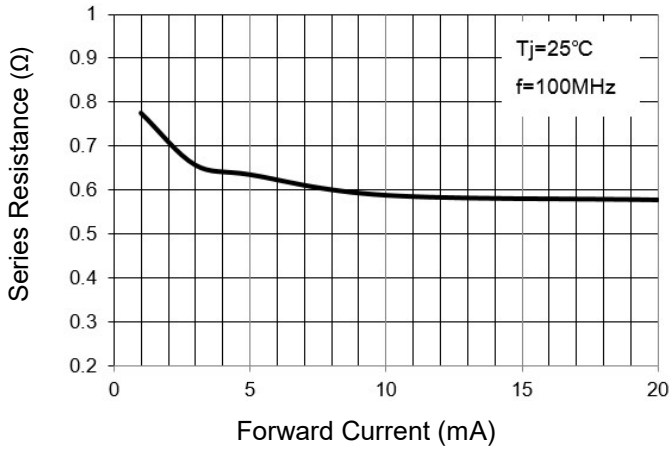


Fig 2. Forward Characteristic Curve

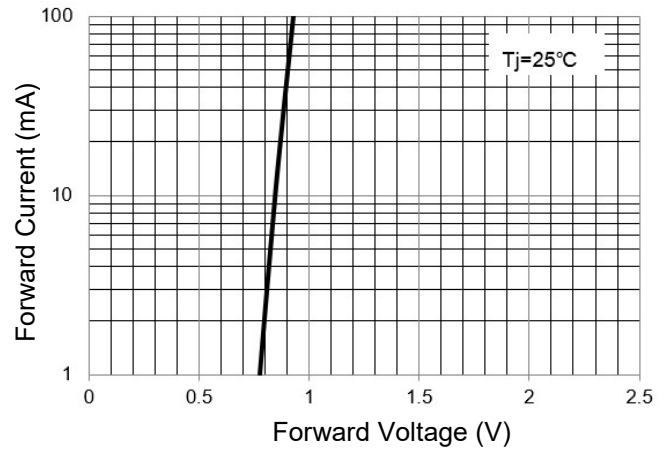


Fig 3. Junction Capacitance

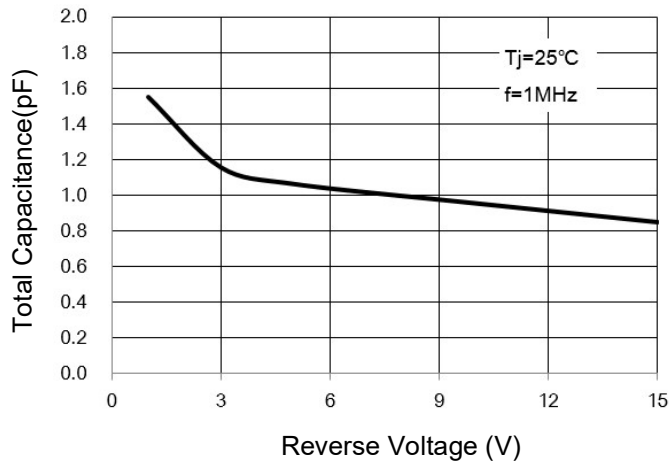
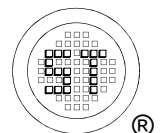
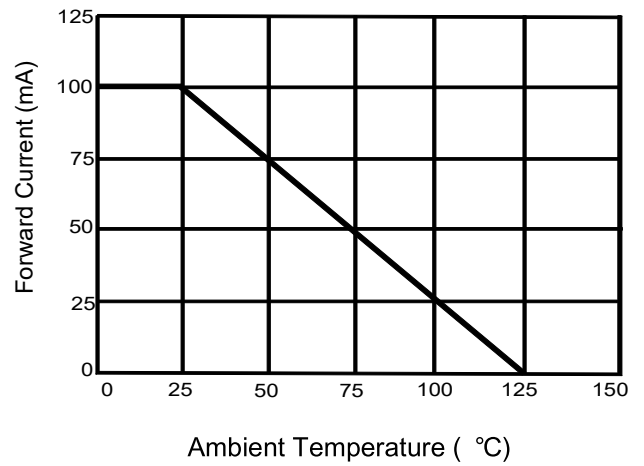


Fig 4. Forward Current Derating Curve

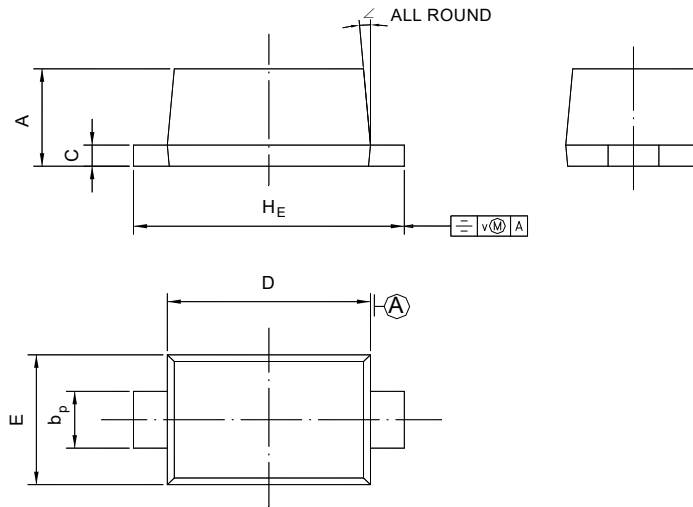


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## PACKAGE OUTLINE

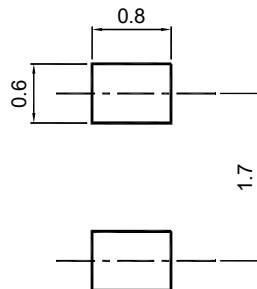
Plastic surface mounted package

SOD-523



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

### Recommended Soldering Footprint



### Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-523	8	4 ± 0.1	0.157 ± 0.004	178	7	4,000

### Marking information

" W7 " = Part No.

" III " = Cathode line

" • " = HAF (Halogen and Antimony Free(HAF))

Font type: Arial



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