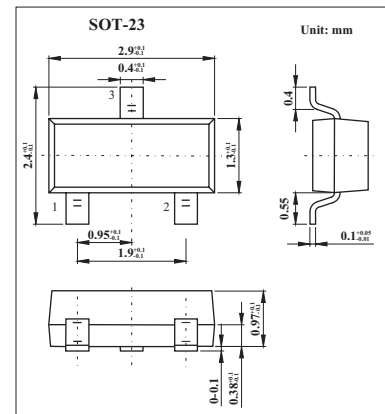


## Silicon Schottky Diodes

## BAS125 series

## ■ Features

- For low-loss, fast-recovery, meter protection, bias isolation and clamping applications
- Integrated diffused guard ring
- Low forward voltage

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

Parameter	Symbol	Conditions	Values	Unit
Reverse voltage	$V_R$		25	V
Forward current	$I_F$		100	mA
Surge forward current	$I_{FRM}$	$t \leq 10 \text{ ms}$	500	mA
Total power dissipation	$P_{tot}$	$T_s < 25^\circ\text{C}$ (Note 3)	250	mW
Junction temperature	$T_j$		150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$		-55 to +150	$^\circ\text{C}$
Junction-ambient	$R_{th JA}$	Note 2	< 725	K/W
Junction-soldering point	$R_{th JS}$		< 565	K/W

## Note

1. For detailed information see chapter Package Outlines.
2. Package mounted on alumina 15 mm × 16.7 mm × 0.7 mm.
3. 450 mW per package.

## Silicon Schottky Diodes

### BAS125 series

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse voltage	$I_R$	$V_R = 20\text{ V}$			1	$\mu\text{ A}$
		$V_R = 25\text{ V}$			10	
Forward voltage	$V_F$	$I_F = 1\text{ mA}$		385	410	mV
		$I_F = 10\text{ mA}$		530		
		$I_F = 35\text{ mA}$		800	900	
Diode capacitance	$C_T$	$V_R = 0, f = 10\text{ kHz}$			1.1	pF
Differential forward resistance	$R_F$	$I_F = 5\text{ mA}, f = 10\text{ kHz}$		15		$\Omega$

#### ■ Marking

Type	BAS125	BAS125-04	BAS125-05	BAS125-06
Marking	13	14	15	16