

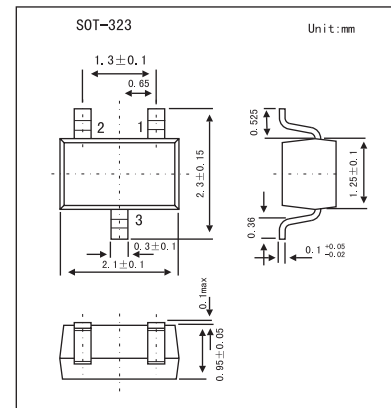
Silicon Schottky Diodes

BAS125W;BAS125-04W

BAS125-05W;BAS125-06W

■ Features

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



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

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	25	V
Forward current	I_F	100	mA
Surge forward current ($t \leq 10\text{ms}$)	I_{FSM}	500	mA
Total Power dissipation $T_s \leq 25^\circ\text{C}$	P_{tot}	250	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-50 to +150	$^\circ\text{C}$
Junction ambient BAS125W (Note 1)	R_{thJA}	≤ 310	K/W
Junction ambient BAS125-04W...06W (Note 1)	R_{thJA}	≤ 425	K/W
Junction - soldering point BAS125W	R_{thJS}	≤ 230	K/W
Junction - soldering point BAS125-04W...06W	R_{thJS}	≤ 265	K/W

Note

Package mounted on alumina $15\text{mm} \times 16.7\text{mm} \times 0.7\text{mm}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 20\text{V}$			150	nA
		$V_R = 25\text{V}$			200	
Forward voltage	V_F	$I_F = 1\text{mA}$		385	400	mV
		$I_F = 10\text{mA}$		530	650	
		$I_F = 35\text{mA}$		800	900	
Diode capacitance	C_T	$V_R = 0\text{V}, f = 1\text{MHz}$			1.1	pF
Differential forward resistance	R_F	$I_F = 5\text{mA}, f = 10\text{KHz}$		16		Ω

■ Marking

Type	BAS125W	BAS125-04W	BAS125-05W	BAS125-06W
Marking	13s	14s	15s	16s