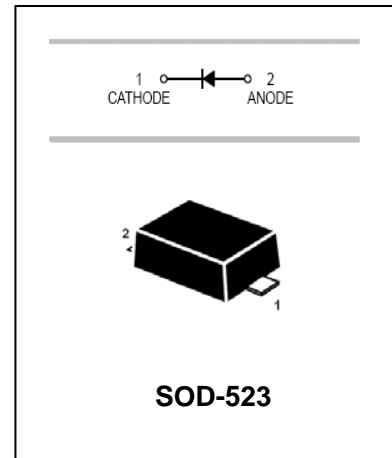


## High Speed Switching Diode

## BAS516

### FEATURES

- Lead finish:100% matte Sn(Tin).
- High speed switching application.
- Extremely small SOD-523 package.
- Qualified maximum reflow temperature:260°C



### APPLICATIONS

- High-speed switching.

### ORDERING INFORMATION

Type No.	Marking	Package Code
NSD914X	5D	SOD-523

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Continuous reverse voltage	$V_R$	100	V
Continuous forward current	$I_F$	200	mA
Non-repetitive peak forward surge current	$I_{FSM}$	500	mA
Total power dissipation	$P_{tot}$	200	mW
Thermal resistance junction-to-ambient	$R_{\theta JA}$	635	°C/W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-65-150	°C

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Min.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	100		V	$I_R=100\mu A$
Forward voltage	$V_F$		1.0	V	$I_F=10mA$
Reverse current	$I_R$		25	nA	$V_R=20V$
			5.0	$\mu A$	$V_R=75V$
Diode capacitance	$C_d$		4.0	pF	$V_R=0, f=1MHz$
Reverse recovery time	$t_{rr}$		4	ns	$I_F=10mA, I_R=10mA$

## High Speed Switching Diode

## BAS516

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

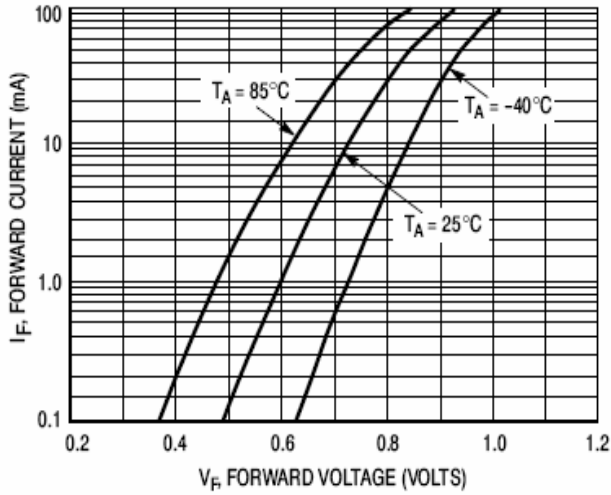


Figure 1. Forward Voltage

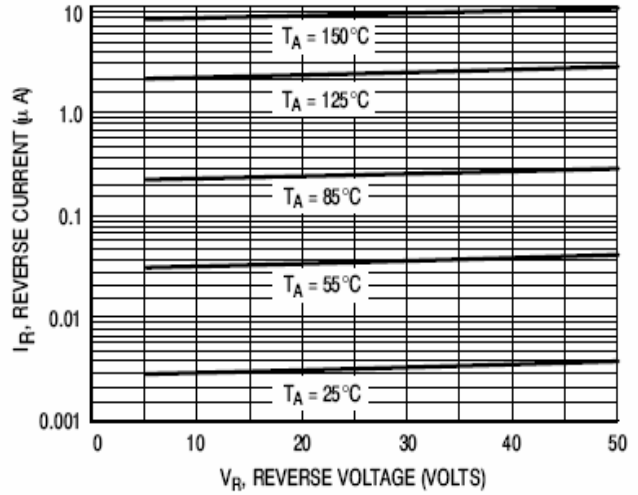


Figure 2. Leakage Current

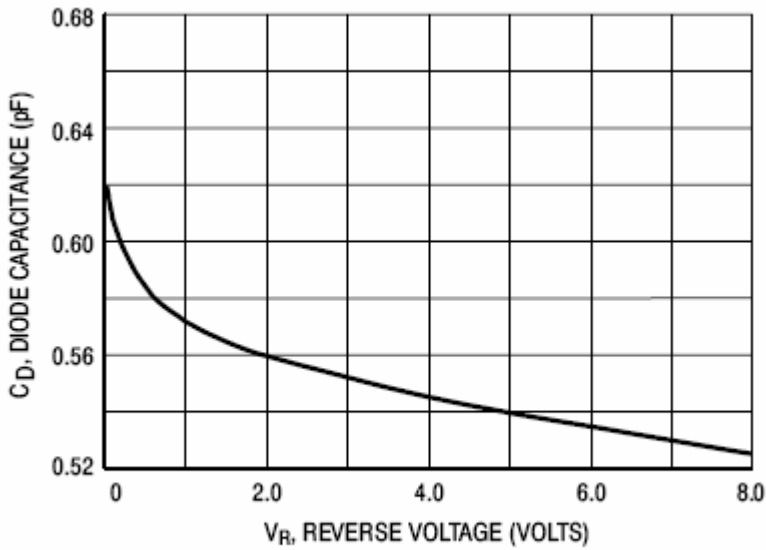


Figure 3. Capacitance

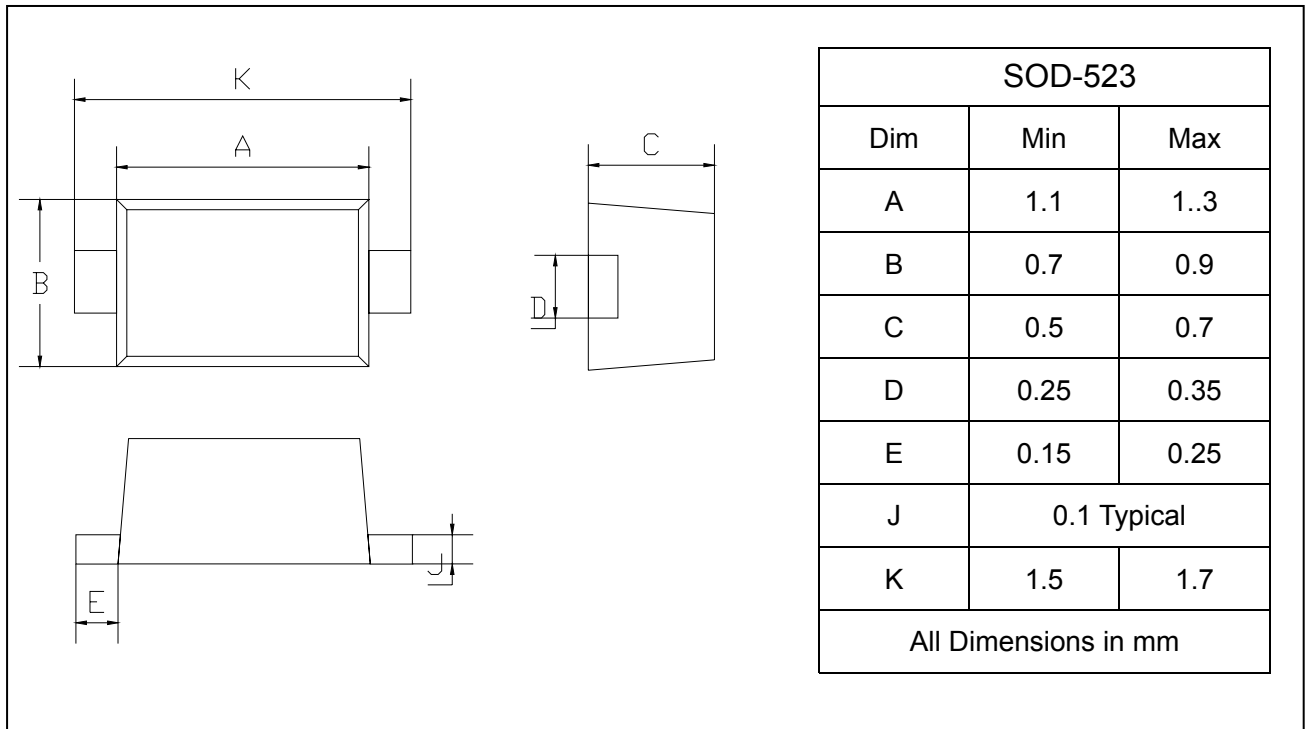
## High Speed Switching Diode

## BAS516

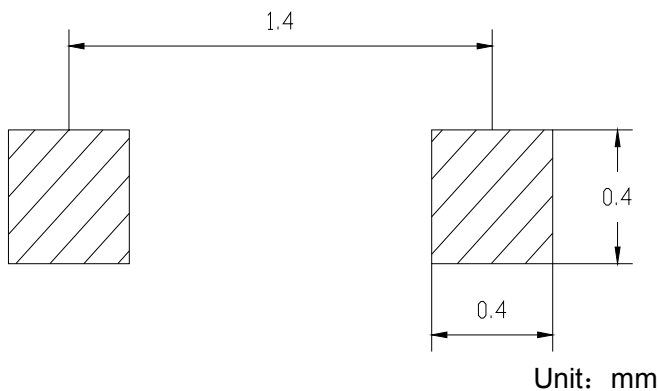
### PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
NSD914X	SOD-523	3000/Tape&Reel