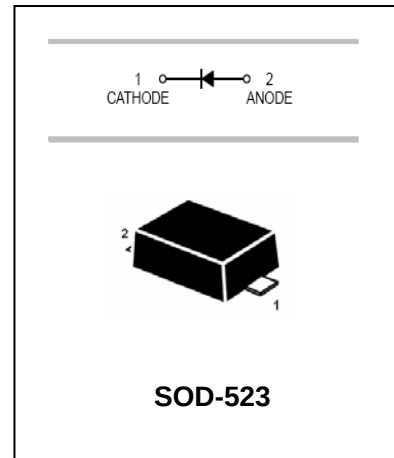


High Speed Switching Diode

BAS516

FEATURES

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



APPLICATIONS

- High-speed switching.

ORDERING INFORMATION

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

MAXIMUM RATING @ Ta=25℃ 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	℃/W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-65-150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ 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	μA	$V_R=75V$
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 @ Ta=25°C unless otherwise specified

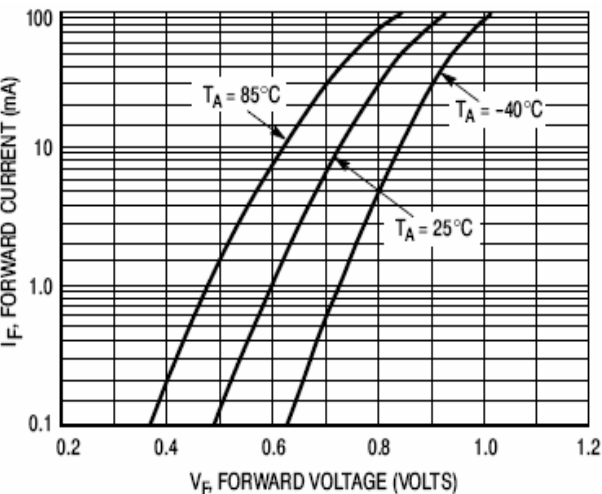


Figure 1. Forward Voltage

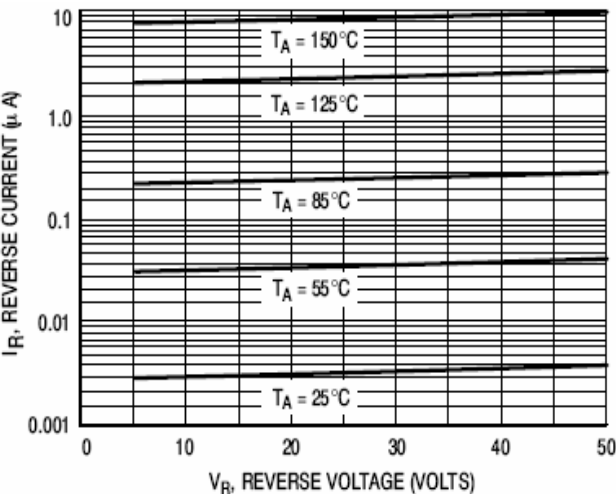


Figure 2. Leakage Current

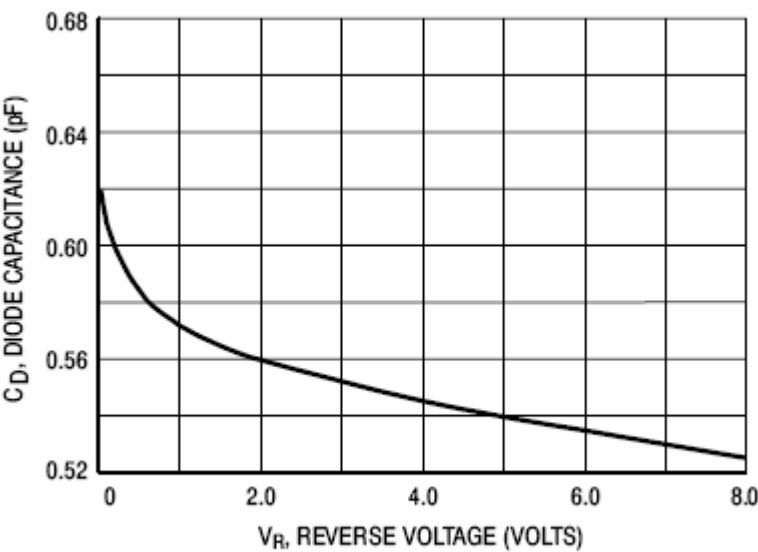


Figure 3. Capacitance

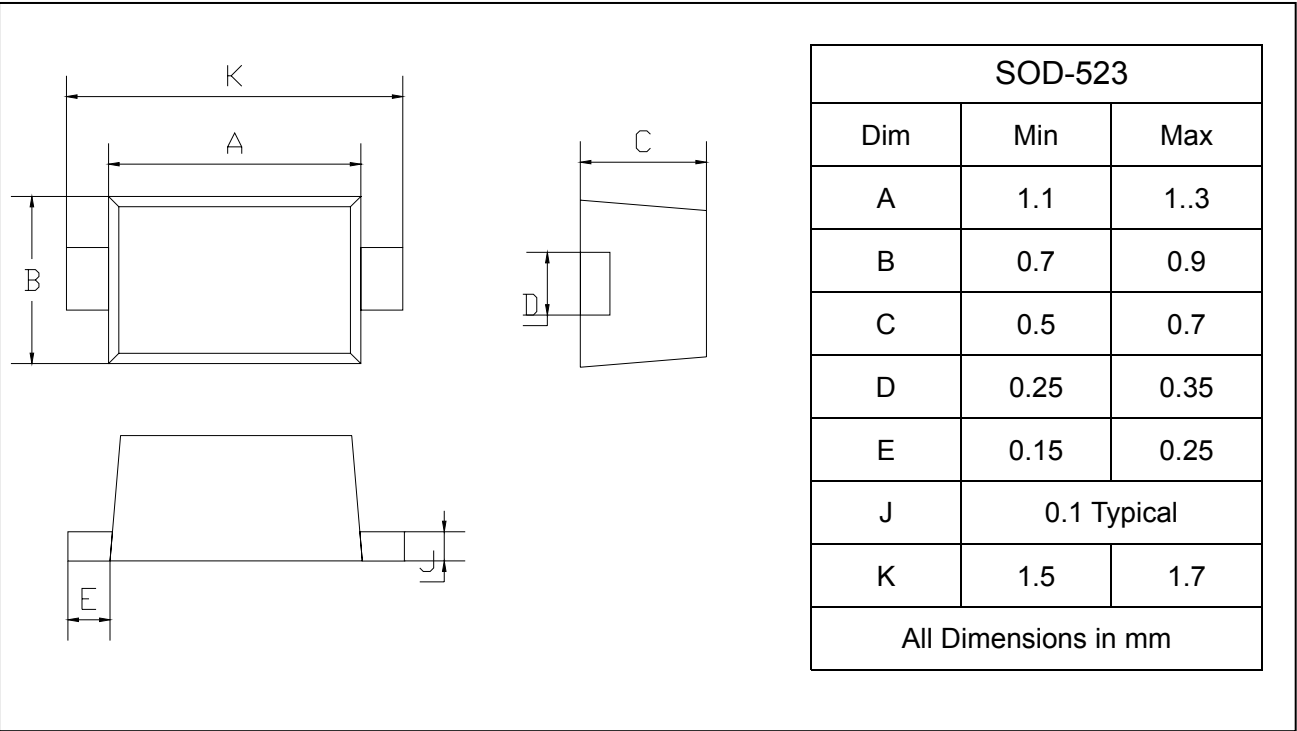
High Speed Switching Diode

BAS516

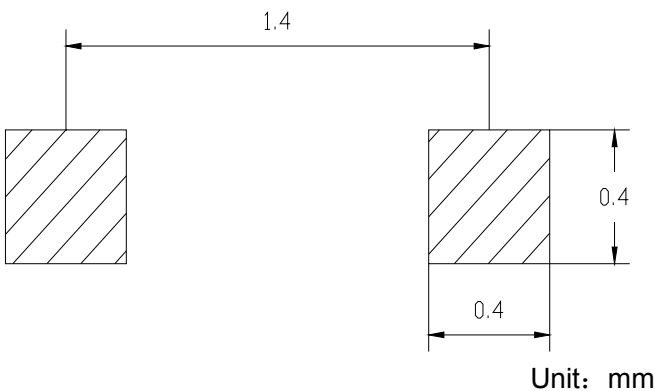
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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