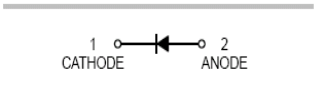
High Speed Switching Diode **BAS516**

FEATURES

Lead-free

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





SOD-523

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=100μA
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℃ unless otherwise specified

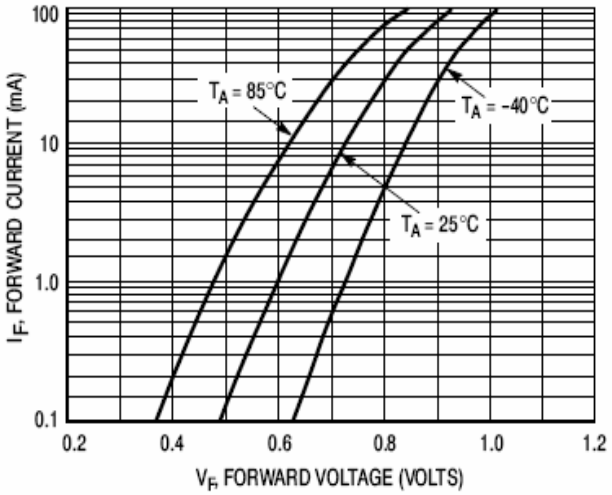


Figure 1. Forward Voltage

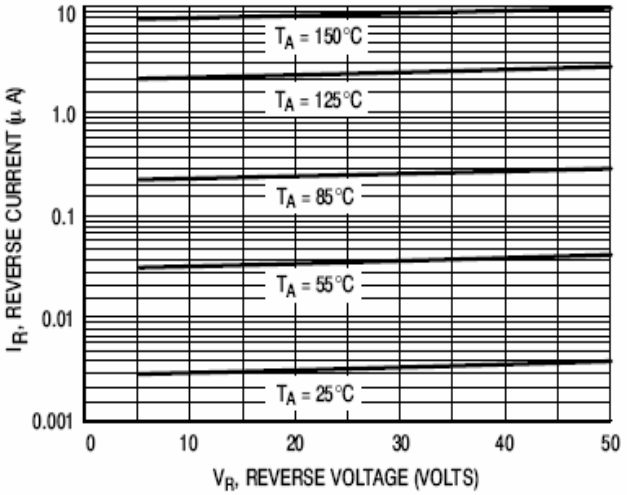


Figure 2. Leakage Current

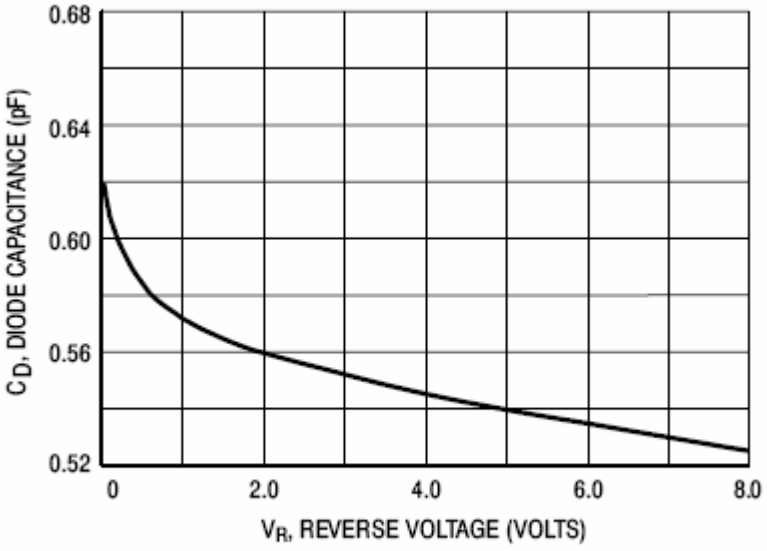
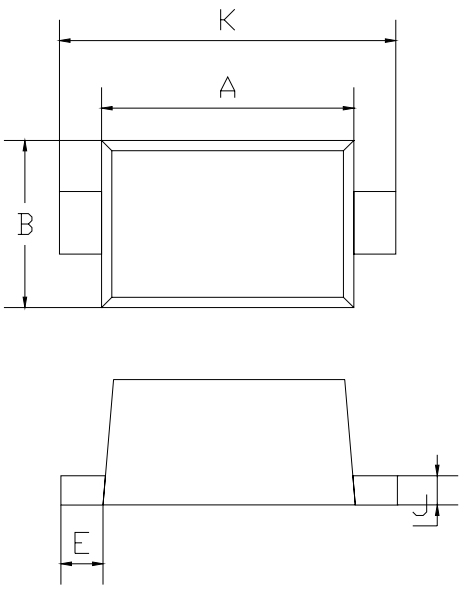


Figure 3. Capacitance

High Speed Switching Diode **BAS516**

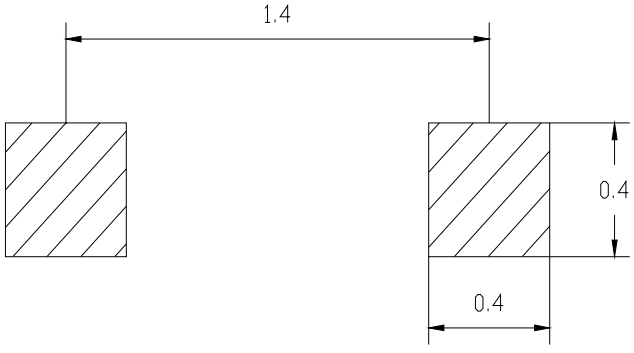
PACKAGE OUTLINE

Plastic surface mounted package SOD-523



SOD-523		
Dim	Min	Max
A	1.1	1..3
B	0.7	0.9
C	0.5	0.7
D	0.25	0.35
E	0.15	0.25
J	0.1 Typical	
K	1.5	1.7
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit：mm

PACKAGE INFORMATION

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