

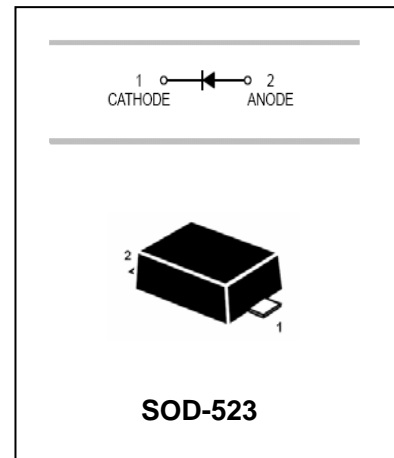


# High speed Switching Diode

# BAS16X

## FEATURES

- Small package.
- High speed switching.



## APPLICATIONS

- High speed switching application.

## ORDERING INFORMATION

Type No.	Marking	Package Code
BAS16X	A6	SOD-523

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

Parameter	Symbol	Limits	Unit
Peak repetitive reverse voltage	$V_{RRM}$	85	V
Working peak reverse voltage	$V_{RWM}$		
DC Reverse voltage	$V_R$		
RMS Reverse voltage	$V_{R(RMS)}$	60	V
Continuous forward current	$I_F$	155	mA
Repetitive peak forward current	$I_{FRM}$	500	mA
Non-Repetitive peak forward surge current	$I_{FSM}$	4.0	A
@t=1.0µs		1.0	
@t=1.0ms		0.5	
Total power dissipation	$P_{tot}$	150	mW
Total resistance junction to ambient	$R_{\theta JA}$	833	°C/W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-65 to +150	°C



**High speed Switching Diode**

**BAS16X**

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)R}$	85			V	$I_R=100\mu A$
Forward voltage	$V_F$			0.715 0.815 1 1.25	V	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$
Reverse current	$I_R$			2.0 30	$\mu A$ nA	$V_R=75V$ $V_R=25V$
Diode capacitance	$C_d$			1.5	pF	$V_R=0V, f=1MHz$
Reverse recovery time	$t_{rr}$			4	ns	$I_F=I_R=10mA, R_L=100\Omega$

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

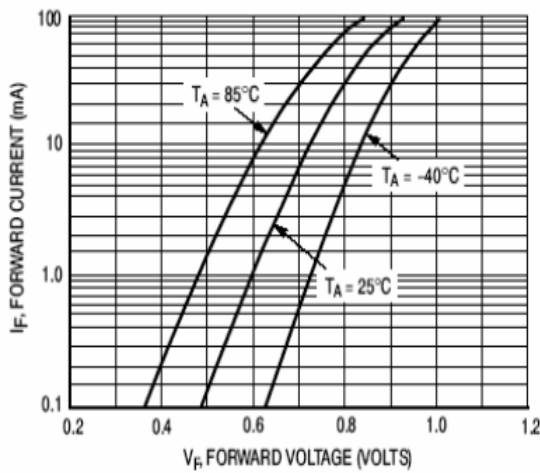


Figure 2. Forward Voltage

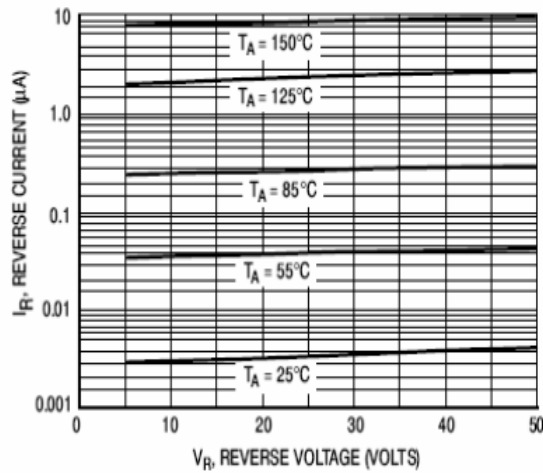


Figure 3. Leakage Current

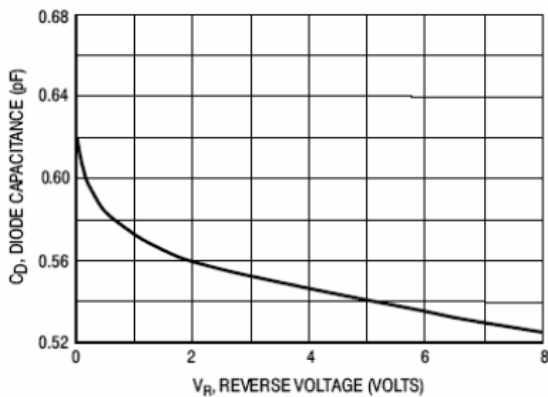


Figure 4. Capacitance



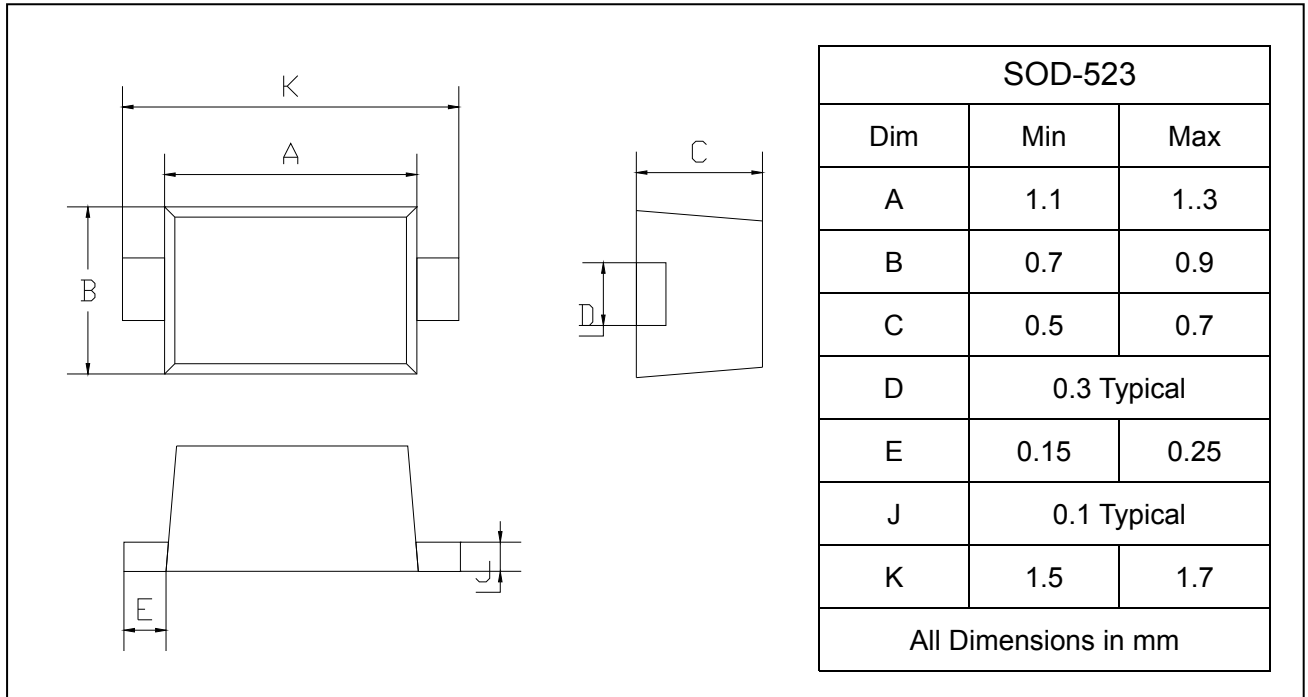
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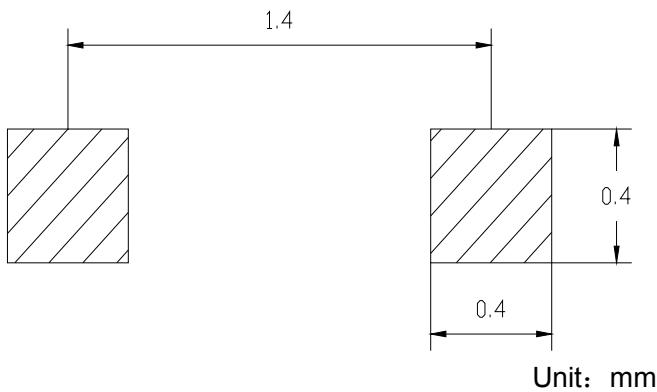
## PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
BAS16X	SOD-523	3000/Tape&Reel