

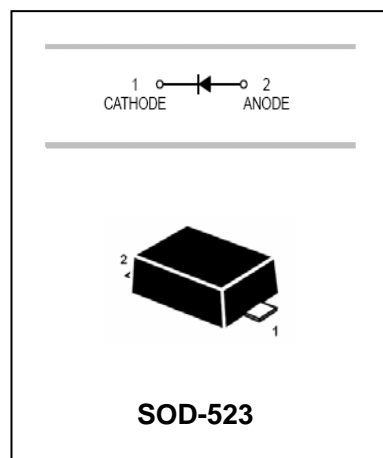


High speed Switching Diode

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



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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	μA 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

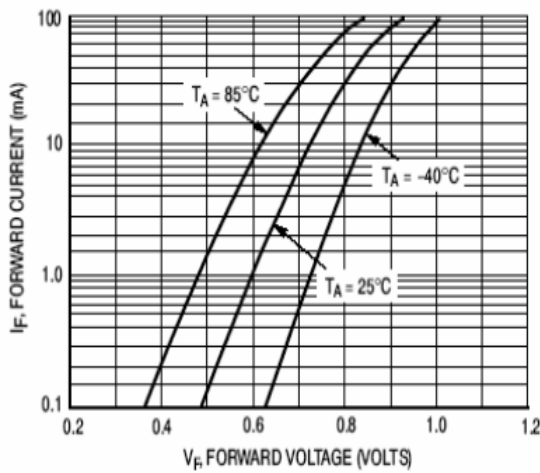


Figure 2. Forward Voltage

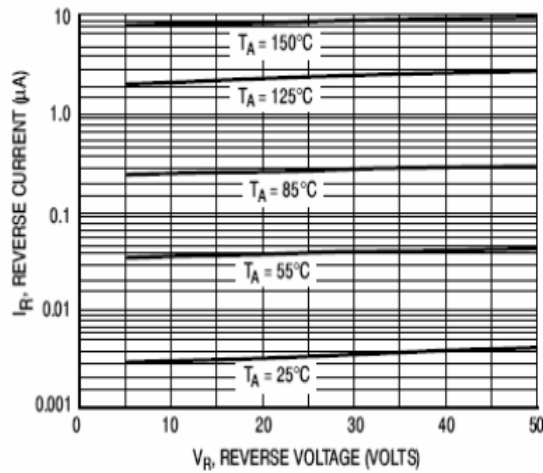


Figure 3. Leakage Current

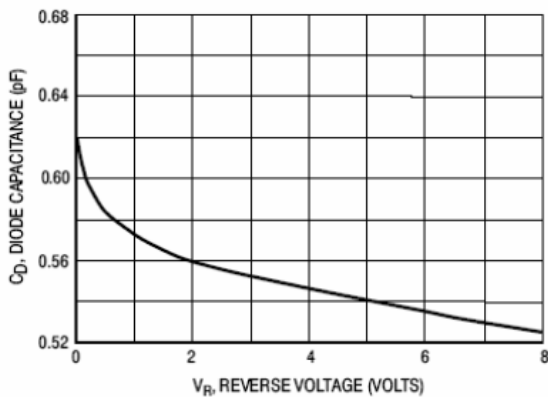


Figure 4. Capacitance



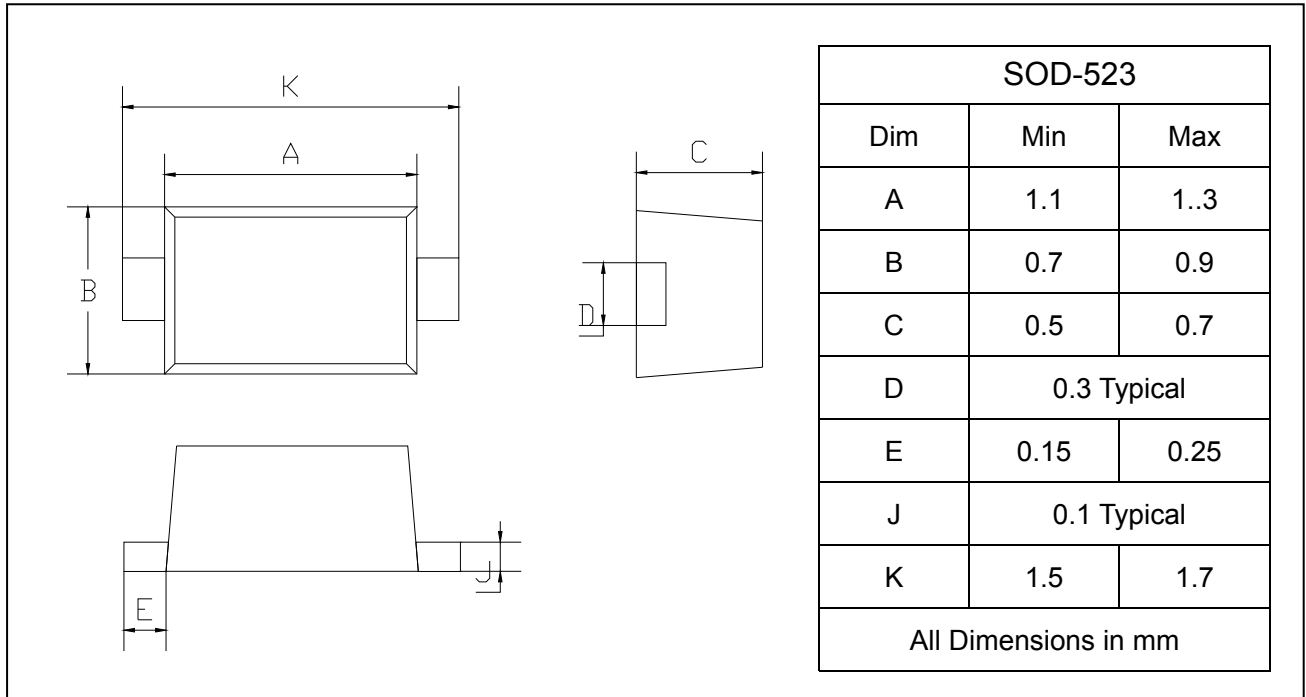
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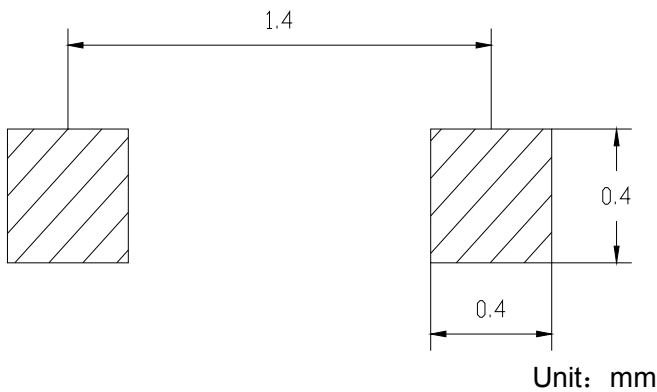
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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