

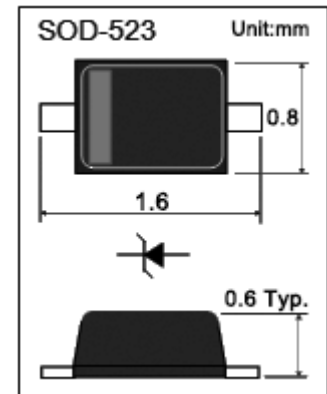
## SOD-523 Plastic-Encapsulate Diodes

### High Voltage Switching Diode

#### FEATURES

- Fast switching devices
- **SOD523** Micro SMD package
- RoHS compliant / Green EMC
- Matte Tin (Sn) Lead finish
- Cathode Band / Device marking
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- AEC-Q101 qualified (Automotive grade with suffix "Q")

Device Marking Code	
<b>BAV3004X</b>	4P



#### Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	350	V
$V_{RRM}$	Repetitive Peak Reverse Voltage	350	V
$V_{R(RMS)}$	RMS Reverse Voltage	300	V
$I_{FM}$	Forward Continuous Current	225	mA
$I_{FRM}$	Repetitive Peak Forward Current	625	mA
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current ( @t=1.0us )	4.0	A
		1.0	A
$P_D$	Power Dissipation	150	mW
$T_J$	Junction Temperature	150	°C
$R_{JA}$	Thermal Resistance Junction to Ambient Air	233	°C/W
$T_{STG}$	Storage Temperature	-55 to +150	°C

#### Electrical Characteristics (Ta = 25 °C)

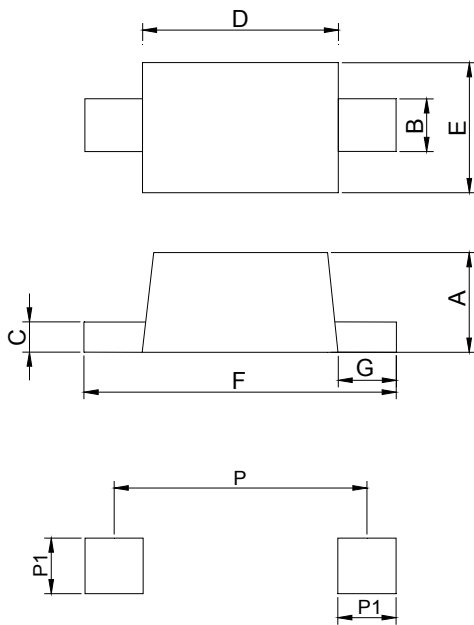
Symbol	Parameter	Conditions	Min	Max	Units
$V_R$	Reverse Breakdown Voltage	$I_R=150\mu A$	350		V
$V_F$	Forward Voltage	$I_F = 20mA$		0.87	V
		$I_F = 100mA$		1.00	V
		$I_F = 200mA$		1.25	V
$I_R$	Reverse current	$V_R= 240V$ (25°C)		100	nA
		$V_R= 240V$ (150°C)		100	$\mu A$
$C_T$	Capacitance	$V_R = 0V, f = 1MHz$		2	pF
$t_{rr}$	Reverse Recovery Time	$I_F = I_R = 30mA,$ $I_{RR} = 0.1 * I_R, R_L = 100\Omega$		50	ns

## Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAV3004X	SOD523	Tape & Reel 8000pcs /7" Reel	8 mm	4 mm	Conductive	

## Package Dimensions

## SOD-523 Package Outline Dimensions



Land Pattern

Symbol	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
A	0.50	0.61	0.77	0.020	0.024	0.030
B	0.25	0.30	0.40	0.010	0.012	0.016
C	0.07	0.13	0.20	0.003	0.005	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
F	1.50	1.60	1.70	0.059	0.063	0.067
G	0.15	0.20	0.25	0.006	0.008	0.010
P1	0.60			0.024		
P	1.42			0.056		