

## BAS516

### Switching Diode

#### FEATURE

- 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

**MARKING:**     **61**

SOD-523F



Schematic diagram



#### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

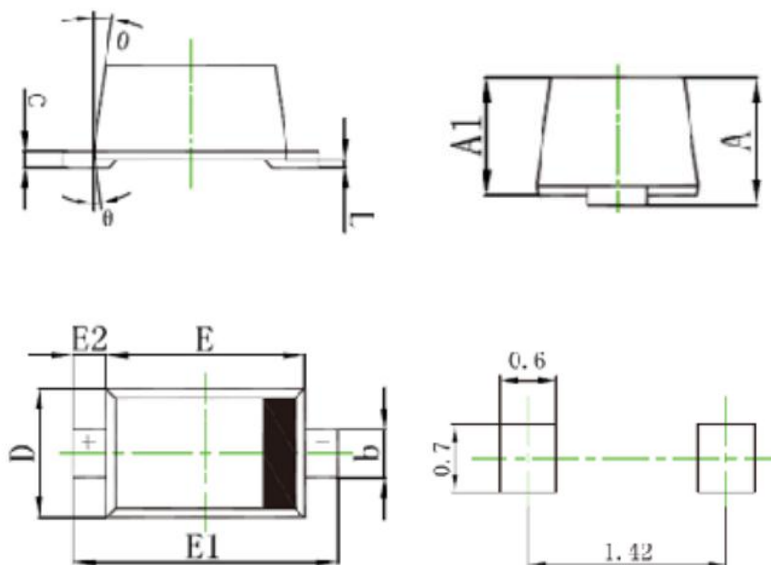
Parameter	Symbol	Value	Unit
DC Reverse Voltage	$V_R$	75	V
Forward Current	$I_F$	250	mA
Repetitive Forward Current	$I_{FRM}$	500	mA
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55 to +150	$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse Voltage	$V_R$	$I_R = 100\mu\text{A}$ ,	75			V
Forward Voltage	$V_F$	$I_F = 1\text{mA}$			0.715	V
		$I_F = 10\text{mA}$			0.855	V
		$I_F = 50\text{mA}$			1.0	V
		$I_F = 150\text{mA}$			1.25	V
		$V_R = 25\text{V}$			30	nA
Reverse current	$I_R$	$V_R = 75\text{V}$			1	$\mu\text{A}$
Diode Capacitance	$C_D$	$V_R = 0\text{V}$ , $f = 1\text{MHz}$			2	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 10\text{mA}$ , $V_R = 0\text{V}$ , $R_L = 100\Omega$			4	ns

**SOD-523F Package Information**

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAS516	SOD-523F	Tape & Reel 8000pcs /7" Reel	8 mm	4 mm	Conductive	



Symbol	Dimensions In Millimeters		
	Min	Typ	Max
A	0.51	-	0.77
A1	0.50	-	0.70
b	0.25	-	0.35
c	0.08	-	0.15
D	0.75	-	0.85
E	1.10	-	1.30
E1	1.50	-	1.70
E2	0.20REF.		
L	0.01	-	0.07
$\theta$	7° REF.		

1. Unit mm