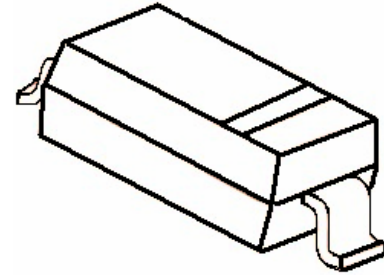


»Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



SOD-123

»General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SOD-123 Plastic Package

» Maximum Ratings @ $T_A=25^{\circ}\text{C}$  unless otherwise noted

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Working Peak Reverse Voltage	$V_{RWM}$	100	V
DC Blocking Voltage	$V_R$	100	V
Average Rectified Forward Current	$I_o$	75	mA
Forward Continuous Current	$I_F$	150	mA
Repetitive Peak Forward Current @ $t_p < 1.0\text{s}$ , Duty Cycle < 50%	$I_{FRM}$	350	mA
Non-repetitive Peak Forward Surge Current@ $t_p = 8.3\text{ms}$	$I_{FSM}$	750	mA
Power Dissipation	$P_d$	500	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	200	$^{\circ}\text{C}/\text{W}$
Operating Temperature Range	$T_j$	-40 to + 125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to + 150	$^{\circ}\text{C}$

»Electrical Characteristics @ $T_A=25^{\circ}\text{C}$  unless otherwise noted

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\mu\text{A}$	100			V
Forward Voltage Drop	$V_F$	$I_F = 0.1\text{mA}$			0.25	V
		$I_F = 10\text{mA}$			0.45	
		$I_F = 250\text{mA}$			1.00	
Peak Reverse Current	$I_R$	$V_R = 1.5\text{V}$			0.5	$\mu\text{A}$
		$V_R = 1.5\text{V}, T_j = 60^{\circ}\text{C}$			5.0	
		$V_R = 10\text{V}$			0.8	
		$V_R = 10\text{V}, T_j = 60^{\circ}\text{C}$			7.5	
		$V_R = 50\text{V}$			2.0	
		$V_R = 50\text{V}, T_j = 60^{\circ}\text{C}$			15	
Total Capacitance	$C_T$	$V_R = 0\text{V}, f = 1\text{MHz}$		10		pF
		$V_R = 1\text{V}, f = 1\text{MHz}$		6.0		

»Typical Performance Characteristics (T<sub>J</sub> = 25 °C, unless otherwise noted)

Fig.1 Power Derating Curve

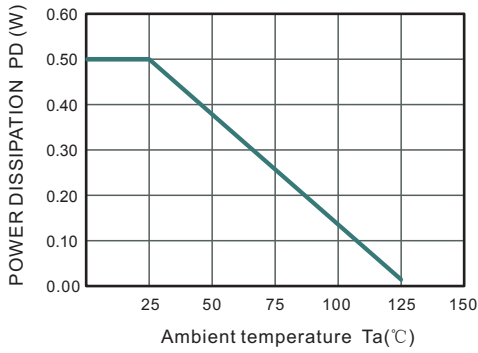


Fig.2 Typical Reverse Characteristics

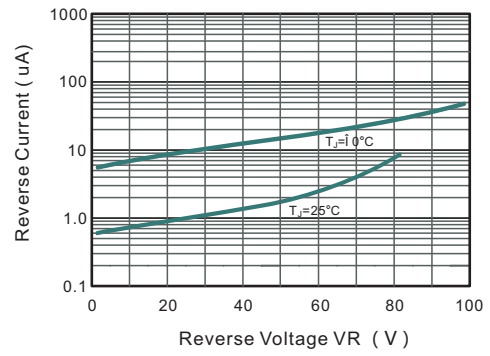


Fig.2 TYPICAL FORWARD VOLTAGE

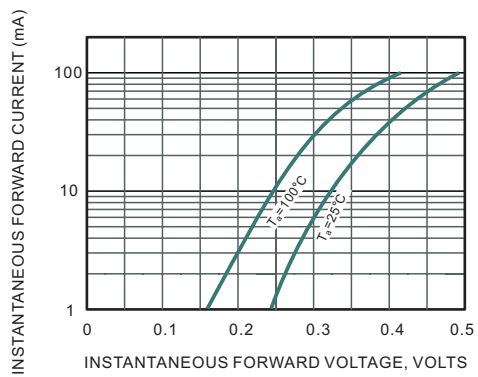
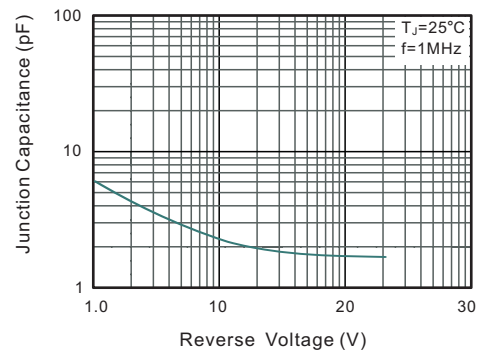
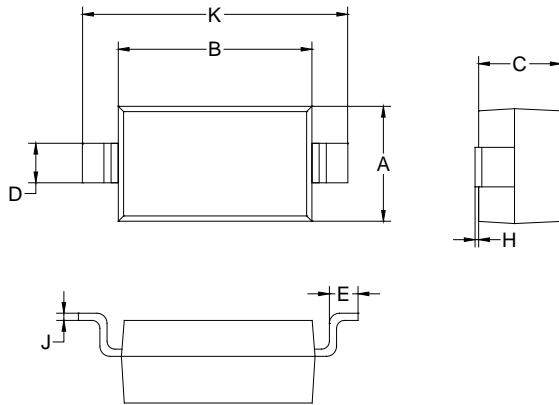


Fig.3 Typical Junction Capacitance



»Package Information

SOD-123



SOD-123		
Dimension	Min.	Max.
A	1.50	1.70
B	2.60	2.80
C	1.05	1.25
D	0.45	0.65
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85

»Ordering information

Order code	Package	Marking	Base qty	Delivery mode
BAT46W	SOD-123	S9	3K	Tape and reel

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Schottky Diodes & Rectifiers](#) category:*

*Click to view products by [Bourne](#) manufacturer:*

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [D83C](#) [BAS16E6433HTMA1](#) [BAT 54-02LRH E6327](#)  
[NRVBAF360T3G](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SK310-T](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [GA01SHT18](#)  
[CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRA140TRPBF](#) [MBRB30H30CT-1G](#) [BAT 15-04R E6152](#) [JANTX1N5712-1](#) [DMJ3940-000](#)  
[SB007-03C-TB-E](#) [SK33B-TP](#) [NRVBB20100CTT4G](#) [NRVBM120LT1G](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#)  
[ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [CDBQC0240LR-HF](#) [ACDBA260LR-HF](#)  
[ACDBA1100-HF](#) [MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [NRVBM120ET1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#)  
[B0530WSQ-7-F](#) [PDS1040Q-13](#) [B160BQ-13-F](#) [SDM05U20CSP-7](#) [B140S1F-7](#)