# EON LITE-ON SEMICONDUCTORS

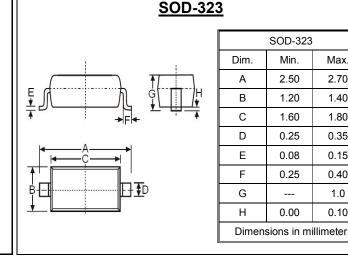
#### SURFACE MOUNT SCHOTTKY BARRIER DIODE

#### **FEATURES**

- Low Turn-on Voltage
- Fast Switching
- Guard Ring Construction for Transient Protection

#### **MECHANICAL DATA**

- Case: SOD-323 Plastic
- · Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture Sensitivity: Level 1 per J-STD-020D
- Lead Free in RoHS 2002/95/EC Compliant



**REVERSE VOLTAGE – 70 Volts** 

FORWARD CURRENT – 0.07 Ampere

#### Maximum Ratings & Thermal Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	BAS70WS	Units
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>		V
Working Peak Reverse Voltage	V <sub>RWM</sub>	70	v
DC Blocking Voltage	V <sub>R</sub>		
Forward Continuous Current	l <sub>F</sub>	70	mA
Peak Forward Surge Current@<1.0s	I <sub>FSM</sub>	100	mA
Power Dissipation	PD	200	mW
Thermal Resistance Junction to Ambient	$R_{\Theta_{JA}}$	625	°C <b>/W</b>
Operating Temperature Range	TJ	125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

#### Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	BAS70WS	Unit	
Maximum Forward Voltage	I <sub>F</sub> = 1mA I <sub>F</sub> = 15mA	V <sub>F</sub>	410 1000	mV	
Maximum DC Reverse Current at Rated DC Blocking Voltage	V <sub>R</sub> = 50V	I <sub>R</sub>	100	nA	
Total Capacitance	V <sub>R</sub> =1.0V,f=1MHz	CT	2	pF	
Reverse Recovery time	Irr=1mA, IR=IF=10mA RL=100Ω	trr	5	nS	
			DEV 4 Oct 2040 KG	DEV 1 Oct 2010 KSHD18	

REV. 1, Oct-2010, KSHR18

### **BAS70WS**

Max.

2.70

1.40

1.80

0.35

0.15

0.40

1.0

0.10

## RATING AND CHARACTERISTIC CURVES BAS70WS

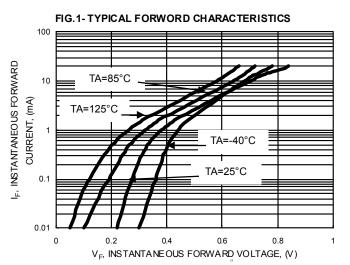
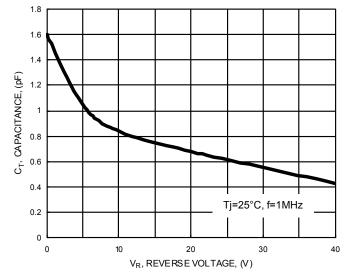


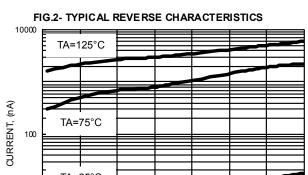
FIG.3- TYPICAL JUNCTION CAPACITANCE



#### **Device Marking :**

Device P/N	Marking	Equivalent Circuit Diagram
BAS70WS	K73	1 <b>0</b> −−− <b>0</b> 2

I<sub>R</sub>, INSTANTANEOUS REVERSE



TA=25°C

V<sub>R</sub>, INSTANTANEOUS REVERSE VOLTAGE, (V)





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