

# Schottky Barrier Diode

multicomp<sup>PRO</sup>

RoHS  
Compliant



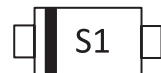
## Features

- Low Power Loss, High Efficiency
- Low Forward Voltage Schottky Rectifier
- High Current Capability
- High Surge Capability
- Halogen Free

## Schematic and PIN Configuration



## Marking Code



## Specifications

Forward Current	: 300mA
Reverse Voltage	: 30V
Terminals	: Matte tin plated
Case	: SOD123 Package

## Maximum Ratings (@TA = +25°C, unless otherwise specified.)

### Absolute Ratings

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	VRRM	30	V
RMS Voltage	VRMS	21	
DC Blocking Voltage	V DC	30	
Forward Rectified Current	IFM	300	mA
Peak Forward Surge Current @ t = 8.3ms	IFSM	600	mA
Power Dissipation	PD	500	mW
Storage Temperature Range	TSTG	-50 to +150	°C
Thermal Resistance from Junction to Ambient	RθJA	250	°C/W

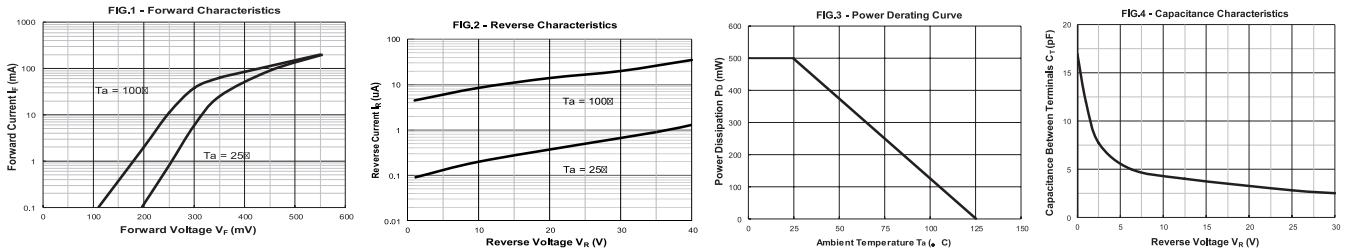
### Electrical Characteristics

Parameter	Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage	IR = 100μA	VBR	30	-	-	V
Reverse Current	VR = 25V	IR	-	-	2	μA
Forward Voltage	IF = 0.1mA	VF	-	-	0.24	V
	IF = 1mA		-	-	0.32	
	IF = 10mA		-	-	0.4	
	IF = 30mA		-	-	0.5	
	IF = 100mA		-	-	0.8	
Junction Capacitance	VR = 1V, F = 1MHz	CD	-	-	10	pF

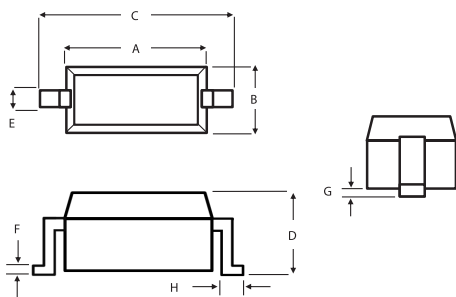
Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
sg.element14.com/b/multicomp-pro

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## Rating and Characteristic Curves

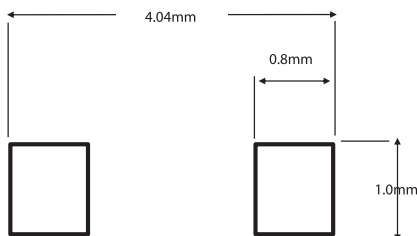


## Diagram



SOD123 Package		
Dim	Min.	Max.
A	2.6	2.8
B	1.5	1.7
C	3.55	3.85
D	1.05	1.25
E	0.45	0.65
F	0.08	0.15
G	—	0.1
H	0.25	0.45

## Soldering Pad Layout



## Part Number Table

Description	Part Number
Schottky Barrier Diode, 30V, 300mA, SOD-123	BAT54W

Dimensions : Millimetres  
 Tolerance  $\pm 0.05\text{mm}$

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