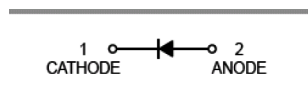


Schottky Barrier Diode

multicomp^{PRO}



RoHS
Compliant

Features:

- Low Turn-On Voltage
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection



SOD-323

Application:

Schottky barrier detector and switching diode

Max. Rating @ TA = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	VRRM	30	V
Working Peak Reverse Voltage	VRWM	30	V
DC Reverse Voltage	VR	30	V
RMS Reverse Voltage	VR(RMS)	21	V
Forward Continuous Current	IF	200	mA
Peak Forward Surge Current (1s single half sine-wave)	IFSM	600	mA
Repetitive Peak Forward Current	IFRM	300	mA

Thermal Characteristics

Parameter	Symbol	Limits	Unit
Power Dissipation *1	PD	200	mW
Thermal Resistance Junction-to-Air *1	RθJA	500	°C/W
Operating junction Temperature	TJ	-55 to +125	°C
Storage Temperature Range	TSTG	-55 to +150	°C

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

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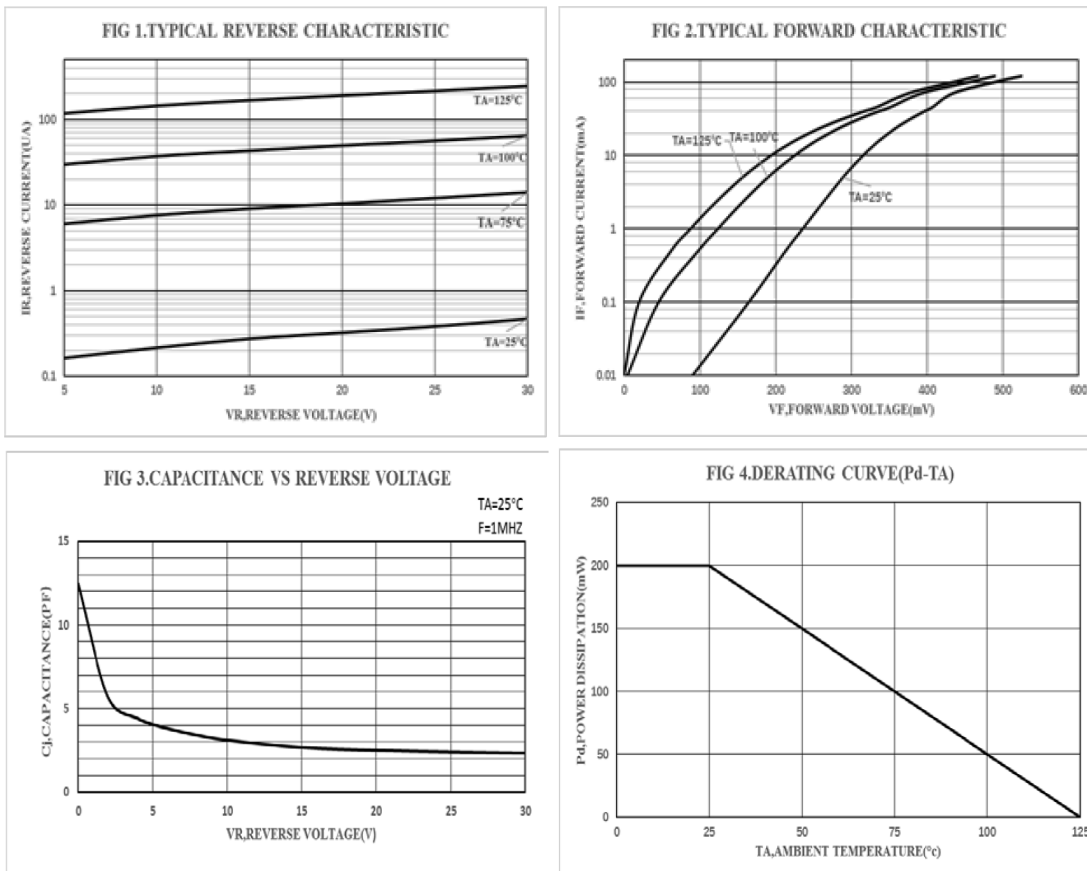
Electrical Characteristics @ TA = 25°C unless otherwise specified

Parameter	Symbol	Test Condition	Min.	Max.	Unit
Reverse Breakdown Voltage	V(BR)R	IR = 100µA	30	-	V
Forward Voltage*2	VF1	IF = 0.1mA	-	240	mV
	VF2	IF = 1mA	-	320	mV
	VF3	IF = 10mA	-	400	mV
	VF4	IF = 30mA	-	500	mV
	VF5	IF = 100mA	-	1,000	mV
Maximum Peak Reverse Current *3	IR	VR = 25V	-	2	µA
Reverse Recovery Time	trr	IF = 10mA, IR = 10mA to 1mA RL = 100Ω	-	5	ns
Typical Junction Capacitance	CJ	VR = 1V, f = 1MHz	-	10	pF

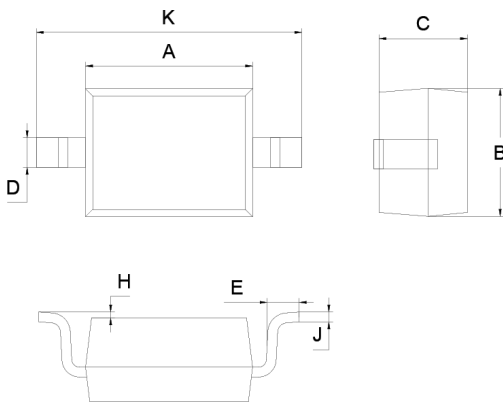
Notes:

1. Part mounted on FR-4 board with recommended pad layout
2. Pulse test, tp ≤ 300µs
3. Pulse test, tp ≤ 5ms

Ratings and Characteristic Curves @ TA = 25°C unless otherwise specified

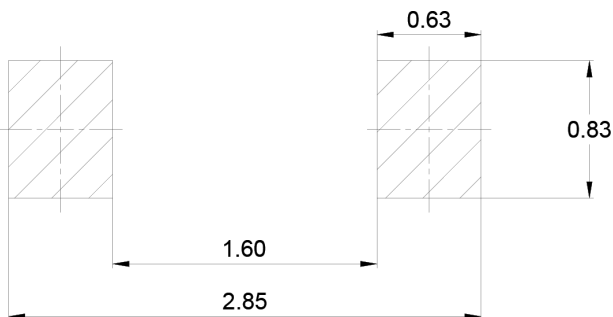


Package Outline Dimensions



SOD-323		
Dimension	Min.	Max.
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout



Package Information

Device	Package	Marking Code
BAT54WS-7-F	SOD-323	L9

Part Number Table

Description	Part Number
Small Signal Schottky Barrier Diode	BAT54WS-7-F

Dimensions : Millimetres

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