

Maximum Ratings @T_A = 25°C unless otherwise specified

Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	30	V
RMS Reverse Voltage		V _{R(RMS)}	21	V
Forward Continuous Current (Note 6)		I _{FM}	200	mA
Repetitive Peak Forward Current (Note 6)	@ t < 1.0s	I _{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	@ t < 10ms	I _{FSM}	4.0	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 6)	P_{D}	200	mW
Thermal Resistance Junction to Ambient Air (Note 6)	$R_{ hetaJA}$	625	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +125	°C

Electrical Characteristics @T_A = 25°C unless otherwise specified

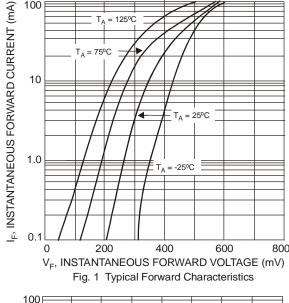
Characteristic		Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 7)		$V_{(BR)R}$	30	_	V	$I_R = 100\mu A$
Forward Voltage Drop	Both Types	V _F	_	1.0	V	$I_F = 200 \text{mA}$
	BAT42WS		_	0.40		$I_F = 10mA$
	BAT42WS		_	0.65		$I_F = 50 \text{mA}$
	BAT43WS		0.26	0.33		$I_F = 2.0 \text{mA}$
	BAT43WS		_	0.45		I _F = 15mA
Develop Comment (Nicto 7)		_	_	500	nA	V _R = 25V
Reverse Current (Note 7)		IR	_	100	μΑ	$V_R = 25V, T_J = 100^{\circ}C$
Total Capacitance		C _T	_	10	pF	V _R = 1.0, f = 1.0MHz
Reverse Recovery Time		t _{rr}	_	5.0	ns	$I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$

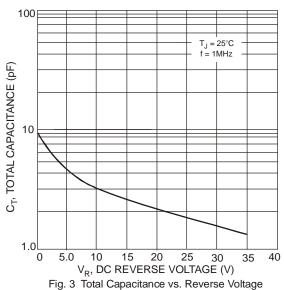
Notes:

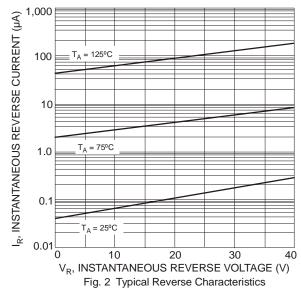
^{6.} Part mounted on FR4 PC Board with recommended pad layout, which can be found on our website at http://www.diodes.com.

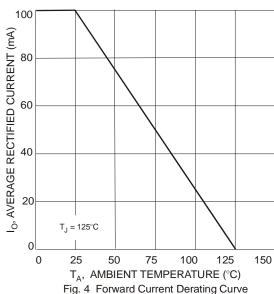
^{7.} Short duration pulse test used to minimize self-heating effect.



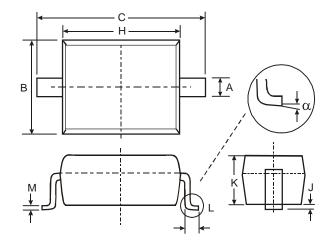








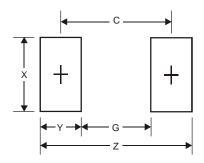
Package Outline Dimensions



SOD323			
Dim	Min	Max	
Α	0.25	0.35	
В	1.20	1.40	
С	2.30	2.70	
Н	1.60	1.80	
J	0.00	0.10	
K	1.0	1.1	
L	0.20	0.40	
M	0.10	0.15	
α	0°	8°	
All Dimensions in mm			



Suggested Pad Layout



Dimensions	Value (in mm)
Z	3.75
G	1.05
Х	0.65
Y	1.35
С	2.40

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