

## Maximum Ratings (@T<sub>A</sub> = 25°C, unless otherwise specified.)

Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	85	V
RMS Reverse Voltage		V <sub>R(RMS)</sub>	60	V
Forward Continuous Current (Note 6)	Single Diode Double Diode	I <sub>FM</sub>	215 125	mA
Repetitive Peak Forward Current		I <sub>FRM</sub>	500	mA
Non-Repetitive Peak Forward Surge Current	@ t = 1.0µs @ t = 1.0ms @ t = 1.0s	I <sub>FSM</sub>	4.0 1.0 0.5	А

# **Thermal Characteristics**

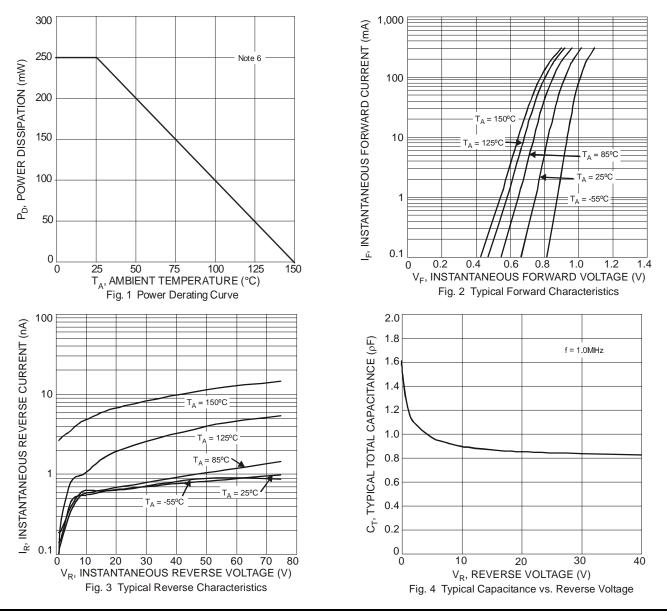
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 6)	PD	250	mW
Thermal Resistance Junction to Ambient Air (Note 6)	$R_{ ext{ heta}JA}$	500	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

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

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 7)	V <sub>(BR)R</sub>	85	—	_	V	I <sub>R</sub> = 100μA
Forward Voltage	VF	_	_	0.90 1.0 1.1 1.25	V	$I_{F} = 1.0mA$ $I_{F} = 10mA$ $I_{F} = 50mA$ $I_{F} = 150mA$
Leakage Current (Note 7)	I <sub>R</sub>	—	_	5.0 80	nA nA	V <sub>R</sub> = 75V V <sub>R</sub> = 75V, T <sub>J</sub> = 150°C
Total Capacitance	CT	_	2		pF	V <sub>R</sub> = 0, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>		_	3.0	μs	$I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$

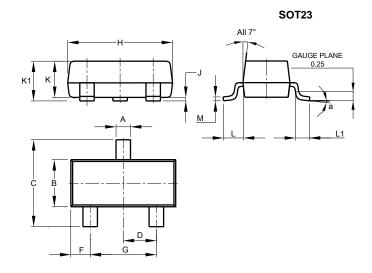
Notes: 6. Part mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com. 7. Short duration pulse test used to minimize self-heating effect.





### **Package Outline Dimensions**

Please see http://www.diodes.com/package-outlines.html for the latest version.



SOT23				
Dim	Min	Max	Тур	
Α	0.37	0.51	0.40	
в	1.20	1.40	1.30	
С	2.30	2.50	2.40	
D	0.89	1.03	0.915	
F	0.45	0.60	0.535	
G	1.78	2.05	1.83	
Н	2.80	3.00	2.90	
J	0.013	0.10	0.05	
κ	0.890	1.00	0.975	
K1	0.903	1.10	1.025	
L	0.45	0.61	0.55	
L1	0.25	0.55	0.40	
Μ	0.085	0.150	0.110	
а	0°	8°		
All Dimensions in mm				

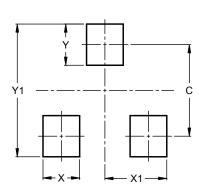
**BAV170** 



**BAV170** 

#### Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.



Dimensions	Value (in mm)
С	2.0
Х	0.8
X1	1.35
Y	0.9
Y1	2.9

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SOT23

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