

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

Characteristic	Symbol	BAS20DW	BAS21DW	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	200	250	V
Working Peak Reverse Voltage	V _{RWM}	150	200	V
DC Blocking Voltage	V _R			V
RMS Reverse Voltage	V _{R(RMS)}	106	141	V
Forward Continuous Current (Note 8)	I _{FM}	400		mA
Average Rectified Output Current (Note 8)	I _O	200		mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs	I _{FSM}	2.5		A
@ t = 1.0s		0.5		
Repetitive Peak Forward Surge Current	I _{FRM}	625		mA

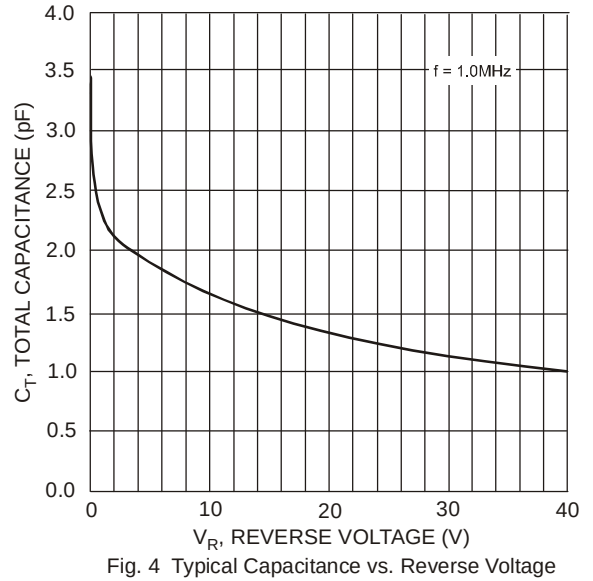
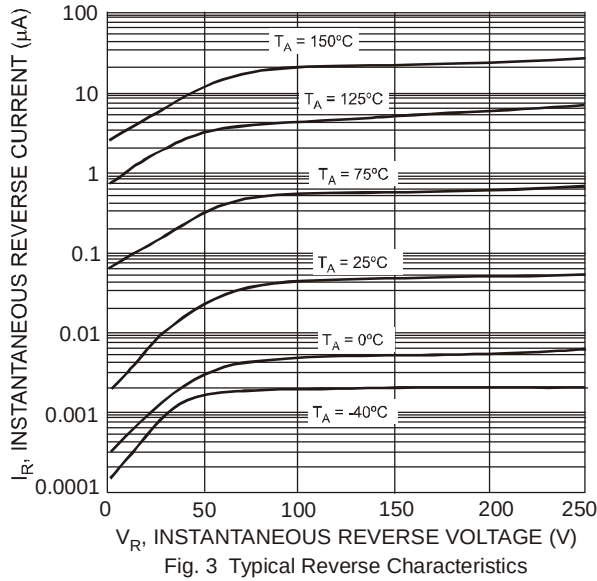
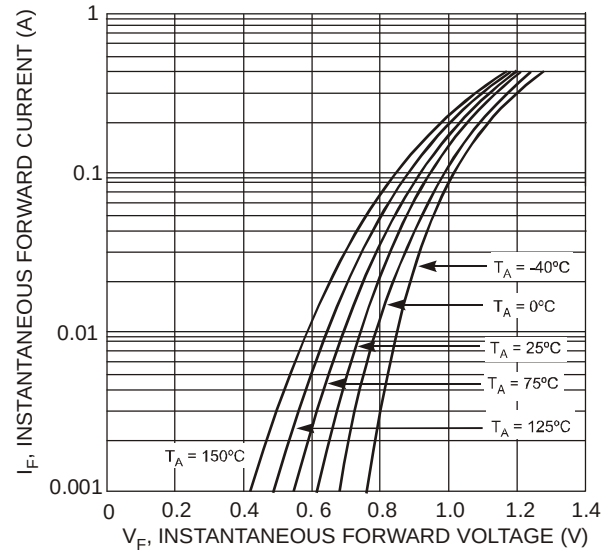
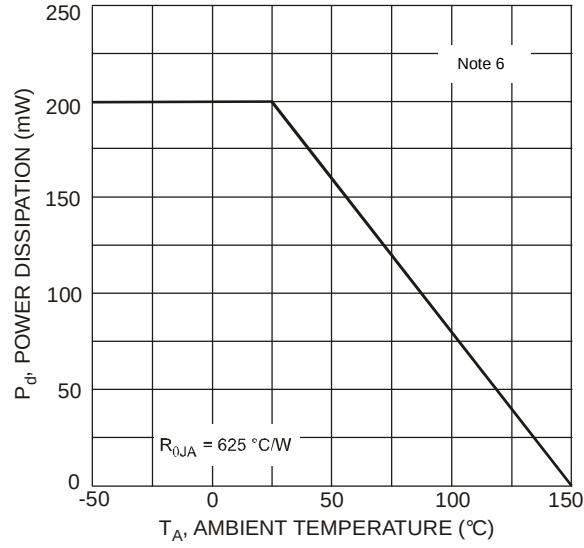
Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 6)	P _D	200	mW
Thermal Resistance Junction to Ambient Air (Note 6)	R _{θJA}	625	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°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}	200 250	— —	V	I _R = 100μA
Forward Voltage	V _F	—	1.0 1.25	V	I _F = 100mA I _F = 200mA
Reverse Current @ Rated DC Blocking Voltage (Note 7)	I _R	—	100 15	nA μA	T _J = +25°C T _J = +100°C
Total Capacitance	C _T	—	5.0	pF	V _R = 0, f = 1.0MHz
Reverse Recovery Time	t _{RR}	—	50	ns	I _F = I _R = 30mA, I _{RR} = 0.1 x I _R , R _L = 100Ω

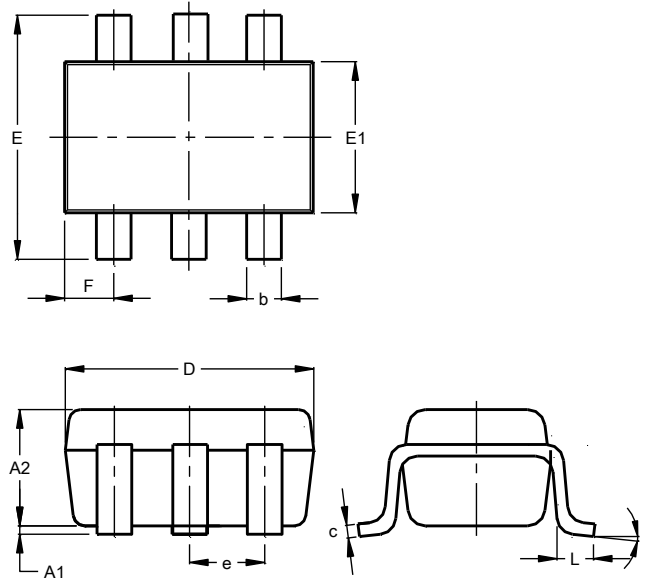
- Notes:
6. Part mounted on FR-4 substrate, 2 oz Cu pad layout board with recommended pad layout, which can be found on our website at <http://www.diodes.com/package-outlines.html>.
 7. Short duration pulse test used to minimize self-heating effect.
 8. Double Diode Loaded in Parallel. For Single Diode or Double Diode Loaded in Series, the continuous forward current should be reduced by half.



Package Outline Dimensions

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

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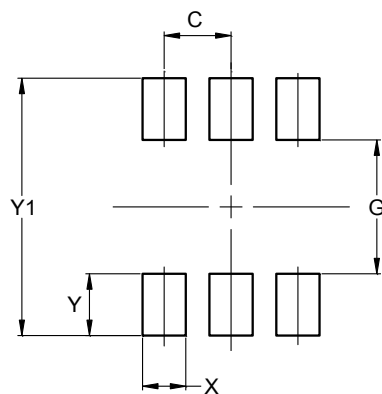


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Dim	Min	Max	Typ
A1	0.00	0.10	0.05
A2	0.90	1.00	0.95
b	0.10	0.30	0.25
c	0.10	0.22	0.11
D	1.80	2.20	2.15
E	2.00	2.20	2.10
E1	1.15	1.35	1.30
e	0.650 BSC		
F	0.40	0.45	0.425
L	0.25	0.40	0.30
a	0°	8°	--
All Dimensions in mm			

Suggested Pad Layout

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

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Dimensions	Value (in mm)
C	0.650
G	1.300
X	0.420
Y	0.600
Y1	2.500

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