

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

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	B170BQ	B180BQ	B190BQ	B1100BQ	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	70	80	90	100	V
Working Peak Reverse Voltage	V _{RWM}					
DC Blocking Voltage	V _R					
RMS Reverse Voltage	V _{R(RMS)}	49	56	63	70	V
Average Rectified Output Current @ T _T = +125°C	I _O	1.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms	I _{FSM}	30				A
Single Half Sine-Wave Superimposed on Rated Load						
Repetitive Peak Reverse Current	I _{RRM}	1.0				A

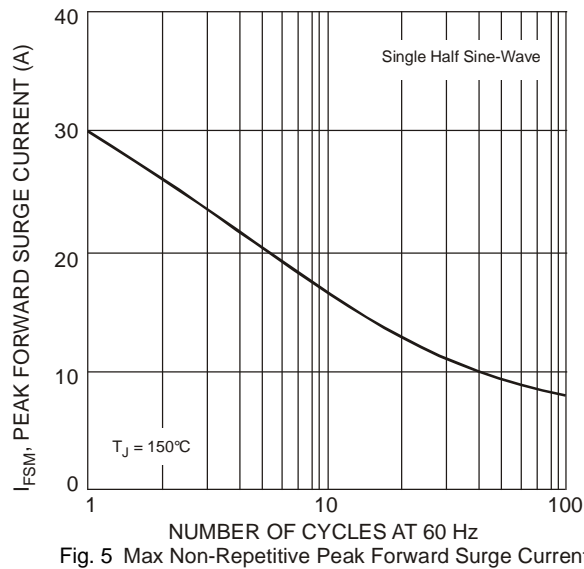
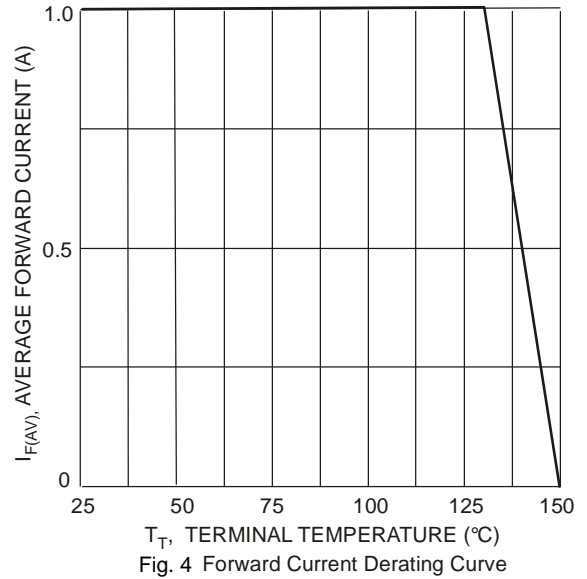
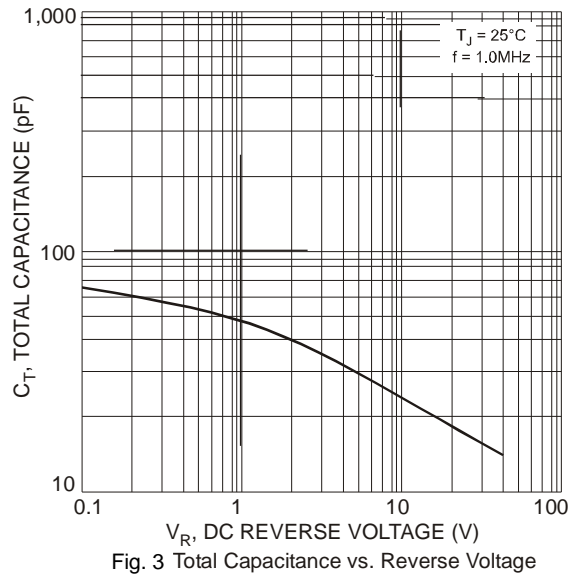
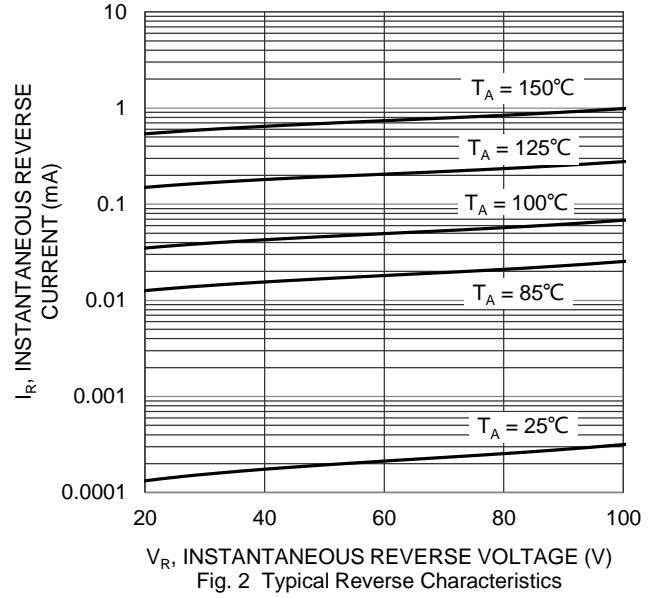
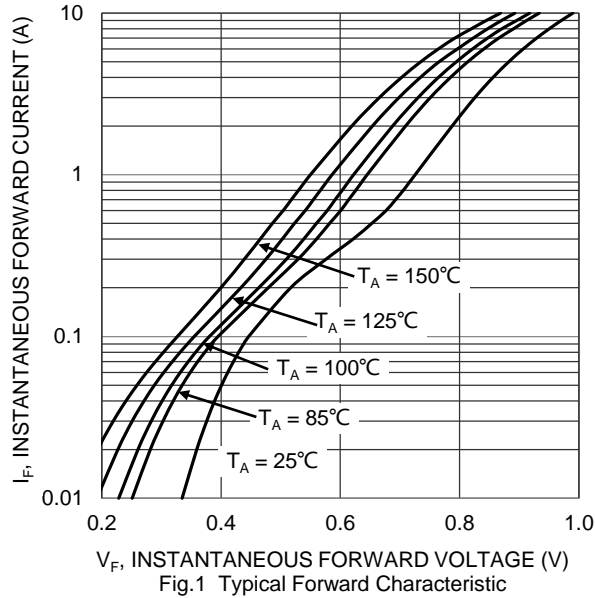
Thermal Characteristics

Characteristic	Symbol	B170BQ	B180BQ	B190BQ	B1100BQ	Unit
Typical Thermal Resistance Junction to Terminal (Note 5)	R _{θJT}	25				°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	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V _F	—	—	0.79 0.69	V	I _F = 1.0A, T _A = +25°C I _F = 1.0A, T _A = +100°C
Leakage Current (Note 6)	I _R	—	—	0.5 5.0	mA	@ Rated V _R , T _A = +25°C @ Rated V _R , T _A = +100°C
Total Capacitance	C _T	—	—	80	pF	V _R = 4V, f = 1MHz

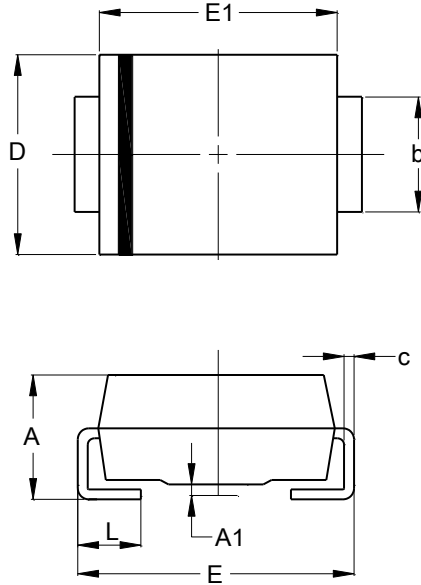
Notes: 5. Valid provided that terminals are kept at ambient temperature.
6. Short duration pulse test used to minimize self-heating effect.



Package Outline Dimensions

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

SMB

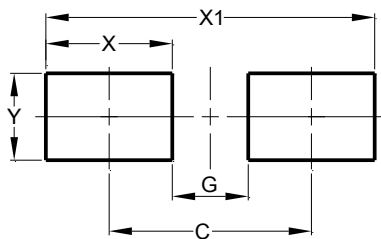


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Dim	Min	Max
A	2.00	2.50
A1	0.05	0.20
b	1.96	2.21
c	0.15	0.31
D	3.30	3.94
E	5.00	5.59
E1	4.06	4.57
L	0.76	1.52
All Dimensions in mm		

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	4.30
G	1.80
X	2.50
X1	6.80
Y	2.30

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